

February 1944

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# SUMERS' RESEARCH

## Bulletin



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# CONSUMERS' RESEARCH



Vol. 13 • No. 2

## BULLETIN

February 1944

### Off the Editor's Chest

**C**ONSIDERABLY more essential consumers' goods are scheduled to be produced in 1944 than have been available in the last year, if we can believe the optimistic press releases that appeared almost daily in the last two months of the old year from various government departments. "Office of Economic Stabilization Director Fred M. Vinson today [December 13, 1943] announced details of a far-reaching program for insuring adequate production of essential civilian goods," reads one dispatch. "One million refrigerators and one million washers are scheduled for production in 1944 by the Office of Civilian Requirements" is the opening sentence of another news item. Another begins "The War Production Board is working on plans for reviving production of some most-needed civilian articles in 1944."

Even the president of the CIO, who, with other leaders in his organization, had been among those most prominent and vociferous in demanding in the early days of the war period that all plant facilities must be immediately and completely converted to production of munitions of war, has now urged the elimination of all restrictions on the use of steel for making goods for civilian uses.

The recognition of the importance of keeping households operating efficiently so that men and women alike may devote their best efforts to needed war production, or other gainful work that will enable them to pay taxes to help pay the enormous costs of modern war, comes somewhat belatedly but it is nevertheless welcome. As Consumers' Research has pointed out time and again, providing

for certain civilian needs is as vital to successful prosecution of the war as supplying guns, tanks, and ammunition to the soldiers at the front. The woman who has to stay home from her job on the assembly line in a factory making airplane or radio equipment to do the family ironing because her electric iron has burned out and it takes longer to do the whole job laboriously with the old-fashioned sad-iron, may be responsible through her absence from work for the failure of war supplies to reach the front where they are needed, in time. Likewise men, too, have been absent from needed war jobs because they had to struggle with an electric refrigerator or some other appliance that had quit operating and for the repair of which there were no longer servicemen or parts to be had in their communities. Yet with the present organization of American life, business, and government, it is essential in the interests of health and efficiency that families have clean clothes, and unspoiled, properly refrigerated food.

The Victory models of various sorts that government agencies have grudgingly permitted to be manufactured have not found favor with a buying public which is unique in the world in the extent to which it has been accustomed to good quality and workmanship in the products which it buys. Surveys made by two retail organizations during the past Christmas season indicated that goods of inferior quality even at lower prices were shunned by eager Christmas shoppers. Even with the higher prices now prevalent, consumers have demonstrated

(Continued on page 26)

**Scientific and Technical Experts and Editors:** F. J. Schlink, R. Joyce, M. C. Phillips, A. R. Greenleaf, and Charles L. Bernier. **Editorial Assistant:** Mary F. Roberts.

Symbols used to indicate sources of data and bases of ratings: A—recommended on basis of quality; AA—regarded as worthy of highest recommendation; B—intermediate with respect to quality; C—not recommended on basis of quality; cr—information from Consumers' Research's own tests or investigations; 1, 2, 3—relative prices, 1 being low, 3 high. Note that price and quality are completely differentiated in CR's listings; a quality judgment is independent of price; 43, 44—year in which test was made or information obtained or organized by the staff of Consumers' Research.

It will be advantageous if you will, whenever possible, send prompt notice of change of address at least a month before it is to take effect, accompanying your notice with statement of your old address with name in full. At least three weeks' notice must be given in any case. This rule, however, regarding long advance notice does not apply to military personnel. *Changes of address for men and women in the services will gladly be handled whenever required.*

★ ★ ★ For a brief cumulative index of 1944 BULLETINS preceding this issue, see page 26.

CONSUMERS' RESEARCH BULLETIN, issued monthly by Consumers' Research, Inc. Editorial and Publication Offices, Washington, N.J. Single copy 30c. Subscription price (12 issues) \$3 per year, U.S.A.; Canada and foreign, \$3.50. For libraries, schools, and colleges, a special subscription of nine monthly BULLETINS (October-June, inclusive) is available at \$2; Canada and foreign, \$2.50. Responsibility for all specific statements of fact or opinion at any time made by Consumers' Research lies wholly with the technical director and staff of the organization. Entered as second-class matter November 9, 1934, at the Post Office at Washington, N.J., under the Act of March 3, 1879; additional entry at Easton, Pa. Copyright, 1944, by Consumers' Research, Inc., Washington, N.J. • • Printed in U.S.A. • • CONSUMERS' RESEARCH BULLETIN is on file in many school, college, and public libraries and is indexed in Industrial Arts Index and in the Readers' Guide to Periodical Literature.

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# The Consumers' Observation Post

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LATE WINTER TOMATOES are not so good a source of vitamin C as the vine-matured, sun-ripened summer tomatoes. According to recent studies made by A. D. Holmes and his associates the amount of vitamin C (ascorbic acid) in winter tomatoes is approximately one-third that found in the vine-ripened fresh tomatoes and less than in canned tomatoes put up six months previously. Thus it is suggested that the function of these winter tomatoes is largely that of a table decoration.

\* \* \*

STOCKS OF "ERSATZ" OR VICTORY merchandise continue to plague retailers. Consumers have already demonstrated their distaste for such products in many lines and it has been suggested that the lag in sales of low- and popular-priced goods this past Christmas has been due to their poor quality as compared with pre-war stocks. The retailer is faced with the dilemma, in some cases, of having a small selection, or none at all, to offer if he does not carry some "war models." Wise consumers are apparently still quality-conscious and are not inclined to spend money for value not received.

\* \* \*

RAYON HOSIERY, one of the trials that women have had to put up with during the war emergency, is designated by weight as 50 denier, for the very sheer, to 100 denier for what would correspond to service weight silk hose. Due to government restrictions, the supply of the sheerest weight has been curtailed, and stores are having to dispose of increased stocks of the heavier hose. It appears that the heavier yarns are more acceptable when they are made into mesh and lace types of hose, which give a greater illusion of sheerness. An adman's trick for catching the unwary is to label the heavier hose with some such description as "Duration Sheer," "Business Sheer," or "Walking Sheer."

\* \* \*

SPICES, for the most part, are grown in far-away lands, and the war, lack of shipping facilities, and other difficulties have caused severe shortages that are just beginning to show up, now that stock piles are becoming exhausted. The only synthetic spice for which acceptance has been definitely established is the cinnamon-substitute cinnamic aldehyde. This chemical "spice" is customarily combined with a powder such as ground coconut shell for convenient sprinkling. Pepper is made to go further by grinding it coarsely so that the consumer gets less out of a shaker than he did for the same amount of energy expended on pre-war grinds.

\* \* \*

LIGHTERS may be scarce, but not for people with \$137.50, which is what a ladies' lighter described as a "superb lighter for dress or daily use" was priced at in the gift catalog of a well-known Chicago firm dealing in sportsmen's supplies and other luxury goods. The man's model, also solid gold, runs to \$11 more. In a New York store a woman with considerable money to spend on a Christmas present was offered a lighter in a costly "combination" with a cigarette case. Lighters it seems were not being sold separately in that store. The price situation remains somewhat the same with respect to alarm clocks. Anyone with about \$40 to spend can easily have an alarm clock for his very own, for they can still be made in Switzerland; quite a number of these very high-priced alarm clocks are being imported, and a number of department stores are selling them at very fancy prices. The lowest price at which an imported alarm clock has been noted was about \$6 and this was for a very small one about as large in diameter as a man's watch, although three or four times as thick.

**GYPS TO WATCH OUT FOR:** Cookware Associates of Bucyrus, Ohio, have been proceeded against by the Federal Trade Commission for misleading and deceptive practices in connection with the sale of cooking utensils. They are charged with attempting to compel purchasers to accept inferior glass or ceramic utensils in place of aluminum or aluminum alloy cooking ware under penalty of forfeiting deposits paid or of having to await termination of wartime restrictions on the sale of aluminum products. ... Secondhand watches priced at \$40 to \$50 that would normally sell for \$8 to \$10 and at the higher price some have not even been cleaned. Buy only from a reliable store that will guarantee the watch to be new and whose guarantee can be relied upon. In some states it is a violation of law to sell used merchandise as new, and secondhand watches must be plainly tagged as such.

\* \* \*

**FOOD SHORTAGES** are coming more and more to be ascribed to bad administration on the part of the federal war food agencies and to government hoarding. Consumers' use of dried beans, for example, is restricted by rationing, although the 1943 dried bean crop was, on the admission of the OPA Administrator, the largest on record. Commercial canners of pork and beans are also restricted in the quantity they are permitted to pack. In addition the Administration has been paying a 60-cents-per-hundred subsidy on beans, presumably to increase production. In the face of all this, the Food Distribution Administration, according to the Congressional Record for December 1, 1943, offered for sale 109,633 bags that had to be graded U. S. 3 and U. S. Substandard because of deterioration in storage. It is little wonder that some folks are asking whether they are failing to get as much of certain foods as they need because someone or some group may not want them to have it.

\* \* \*

**RECLAIMED WOOL** has been found less durable even when woven into fabrics in combination with virgin wool, than fabrics of all virgin wool, according to researchers at the South Dakota Experiment Station. Consumers who have long had a preference for virgin wool fabrics because of apparent better service, will be glad to have their judgment sustained by these tests.

\* \* \*

**PORK** may contain a parasite known as "trichina" which causes serious illness to human beings who may eat the infected flesh. New Hampshire Health News for December 1943 reports several cases of trichinosis that were apparently caused from a sandwich filling made with "pre-cooked" ham that had been run through the raw meat chopper by the butcher, as a convenience for his customer. In such cases the chopper will often have been infected from previous use in the grinding of raw pork. It cannot be too strongly emphasized that all pork products should be thoroughly cooked before they are eaten. The only possible exception: pork that has been stored in a freezer-locker for a sufficient time will likely be safe since the trichina parasite is destroyed if kept long enough at below-freezing temperatures.

\* \* \*

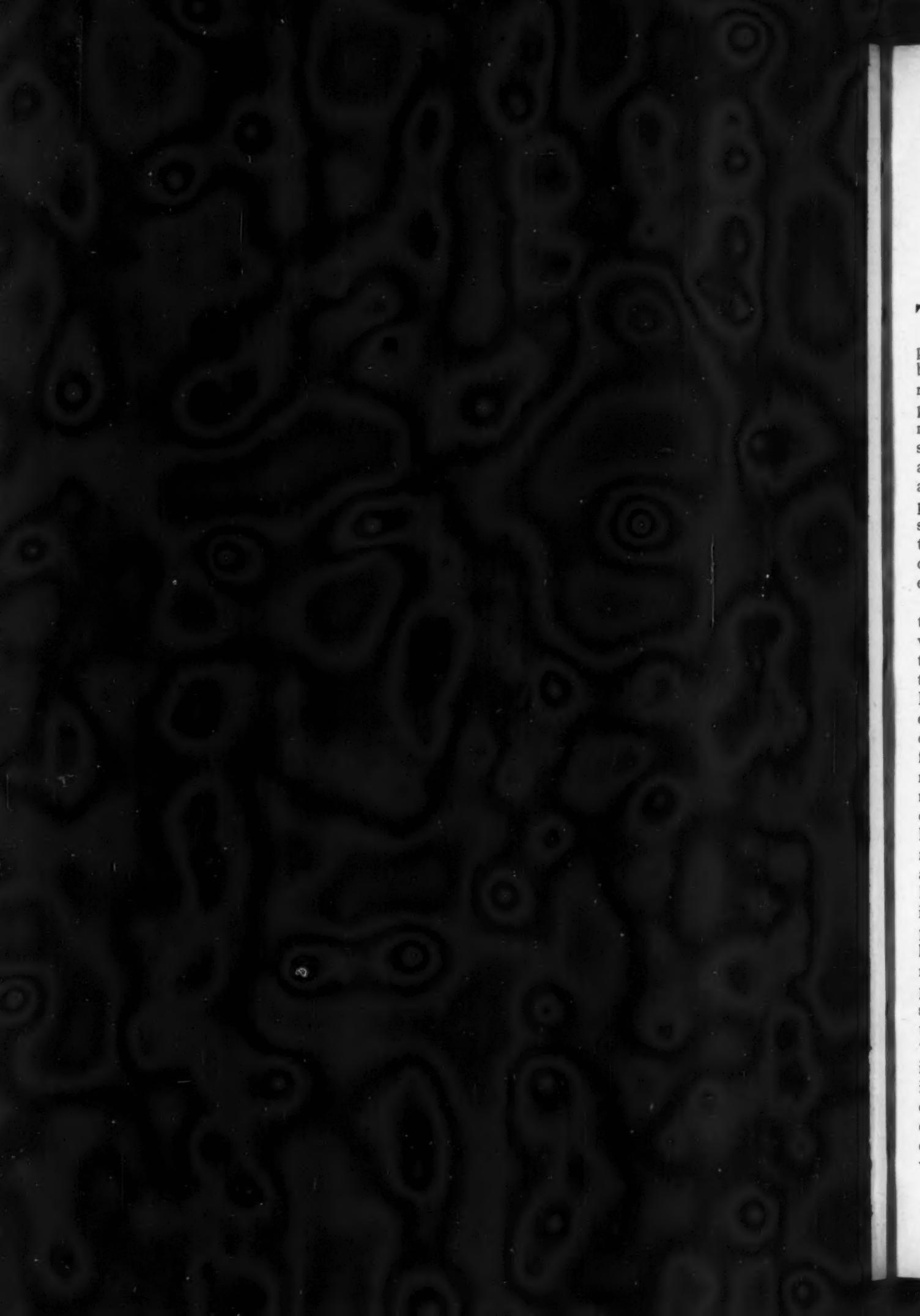
**TOTAL COST** of a year's operation of an automobile on the A book allotment of something like 2 gallons per week in the East (3 gallons in the West) will run to \$282--\$5.40 a week or \$2.70 a gallon. (The figures for the West, corresponding to 3 gallons a week allowance of gasoline, are \$5.61 a week or \$1.87 a gallon.) These calculations, made by a Chicagoan, are based on the assumption of \$40 a year paid out for insurance; \$50 approximately for repairs, greasing, etc.; \$4 a month for garage rent; \$100 depreciation on the car. Smaller items also included are federal, state, and city taxes, and gasoline.

\* \* \*

**WHEN THE OPA PULLS A BONER,** should it be obliged to pay for its mistake? That was a novel question raised by the case of a man who was compelled to drive 195 miles to appear before an OPA "court" in North Platte, Nebraska. Charged with illegal possession of surplus gasoline coupons, the accused dealer was able to prove that his local rationing board had twice refused to take the surplus ration tickets. When his case was dismissed, he pointed out that he should have been putting up hay instead of driving 390 miles to a futile and needless hearing, and asked to whom he should apply for reimbursement for his time. The presiding officer told him he would have to take the matter up with "Uncle Sam"--a nice way out for an irresponsible official.

(The continuation of this section is on page 29)





# The Ubiquitous Vitamin Preparations

By ERWIN DI CYAN, PH. D., AND STELLA STAKVEL, B.A.

THE NEED for vitamins except for therapeutic purposes is strongly overrated. A balanced diet supplies all the required proteins, the energy producing calories, and the vitamins for which "tonics" are so strongly advertised. Additional factors, however, are operative, such as the method of preparation of food, which should be such as to conserve the largest possible proportion of the vitamins naturally present in the food.

Among exceptions justifying the taking of supplementary vitamins as medicinal preparations, is the judicious administration of some form of vitamin D to infants for the prevention of rickets, which many members of the medical profession now favor for use in temperate climates, although even this is not without hazard of being overdone. For that matter, however, rickets is intimately related to the ratio of calcium and phosphorus intake, and it has been demonstrated that the ingestion of substances completely unrelated to vitamin D has prevented rickets in animals on rachitogenic (ricket-producing) diets. These substances, such as acetates, tartrates and citrates create an "alkaline ash." This mention is made for the purpose of pointing out that the maintenance of health requires the keeping of a balance in the human economy—a balance which may very well not be achieved by

*Considering that Americans are expected to spend on the average \$1.15 each, or \$150,000,000 in total on vitamins this year, the subject is obviously one of interest to a very large number of people. A strikingly great increase in volume of sales of this type of medication in the last few years is apparent; the business has almost doubled in the past four years; one may be sure, however, that the public's need for vitamin medication has not increased to any such extent!—Editor's Note.*

indiscriminate dosing with vitamins.

If there appears to be sufficient interest in this comparative evaluation of the various vitamins, we shall present from time to time tables on the several classes of vitamin preparations such as those varieties of the B-complex sold for medical use, to aid the consumer in his understanding of the products offered.

First and foremost, it must be understood that none of such substances should be considered as the panaceas they are very commonly represented or implied to be. As supplements to a diet which is unavoidably unsatisfactory, they may have a certain place, particularly if taken in the quantity and manner determined by a qualified medical practitioner or consistent with the regulations pro-

mulgated by the Food & Drug Administration, if it is impractical for some reason to consult a physician particularly qualified in nutrition (see Table I).

The fact that a given capsule may have a greater quantity of a specific vitamin than another, should not be the determining factor in making a purchase. It has been demonstrated, for example, that under ordinary conditions, no more than 4,000 I.U. (International Units) of vitamin A are needed daily. (A layman, of course, should not attempt to treat exceptional or disease states of the body.) Nevertheless, until recently, the standard ABDG capsule contained 10,000 I.U. of vitamin A per capsule, until the OPA ordered that not more than 5,000 I.U. per capsule should be available for the layman's use. That step was taken to conserve the supply of present stocks of vitamin A. In the past the manufacturer supplied and the consumer paid for 10,000 I.U., without, in ordinary cases, having need for it. Many of the vitamin factors, moreover, are included in the formulation of the vitamin capsules, though the need for certain vitamins by the normal human being has not been demonstrated by scientists in this field. They also happen to be expensive (as  $B_6$  is, for example). The vitamins of the B-complex class are particularly high in price, as tables in a later article will show.

TABLE I

It is to be borne in mind that the quantities of each vitamin set down as the minimum daily requirement are not firmly fixed scientific facts, but are a convenient scale of reference promulgated by the Food and Drug Administration in the attempt to offer a practicable basis of judgment and to help organize our present incomplete knowledge.

Minimum Daily Requirements			
VITAMINS	For Infants (up to 1 year old)	For Children (1 to 12 yrs. old)	For Adults (over 12 yrs. old)
Vitamin A	1500 U.S.P. units	3000 U.S.P. units	4000 U.S.P. units
Vitamin B <sub>1</sub> (Thiamine)	0.25 mg. (83 U.S.P. units)	0.5 mg. (167 U.S.P. units) 1-6 yrs. old  0.75 mg. (250 U.S.P. units) 6-12 yrs. old	1 mg. (333 U.S.P. units)
Vitamin B <sub>2</sub> (G) (Riboflavin)	0.5 mg.	—	2 mg.
Vitamin C (Ascorbic Acid)	10 mg. (200 U.S.P. units)	20 mg. (400 U.S.P. units)	30 mg. (600 U.S.P. units)
Vitamin D	400 U.S.P. units	400 U.S.P. units	400 U.S.P. units
Vitamin B <sub>6</sub> (Pyridoxin)	NEED IN HUMAN NUTRITION NOT YET DEFINED		
Vitamin E	NEED IN HUMAN NUTRITION NOT YET DEFINED		
Nicotinamide	AMOUNT NEEDED NOT YET PROMULGATED		
MINERALS			
Calcium	—	750 mg.	750 mg. (1500 milligrams for pregnant or lactating women)
Phosphorus	—	750 mg.	750 mg. (1500 mg. for preg- nant or lactating women)
Iron	—	7.5 mg. (1-6 yrs. old) 10 mg. (6-12 yrs. old)	10 mg. (15 mg. for preg- nant or lactating women)
Iodine	—	0.1 mg.	0.1 mg.
Copper	NEED IN HUMAN NUTRITION NOT YET DEFINITELY FORMULATED		
Manganese			
Magnesium			
Zinc			

An important consideration in our evaluation of the various vitamin preparations is the *portion* of the various vitamins, as well as the quantity of vitamins per capsule. The effective price relations are deducted from these factors.

Some understanding of the promotion claims for "mixed vitamins" by their makers can

be gained from a study of the therapeutic background of the problem, as well as its history, i.e., a study of what factors led to the making of ABDG capsules.

When in the early 1930's a great deal of activity began in the synthesis of vitamins and their clinical applications, newspapers and popular magazines

reported its progress with great enthusiasm. Even today one comes across a great deal of over-emphasis in newspaper and magazine reports of scientific meetings and announcements of new discoveries. In descriptions of a study of some vitamin or related product, for example, the journalistic tendency is often to lift a statement from its context, usually giving the effect of a "punch line," but losing thereby the true import of the findings of the paper which was presented and important qualifications on their application. (There is also a regrettable tendency, often noted even in semi-scientific journals, to glorify the latest discovery of nutrition and medical scientists and to throw out, as it were, all of the knowledge prior to the last discovery as though it had suddenly become untrue or invalid.)

As further studies showing the importance of vitamins were published, they were brought before the public by the drug manufacturers. It appears that capsules of vitamins A and D were the first popular combination, shortly followed by the inclusion of "vitamin B," which was the loose designation for vitamin B<sub>1</sub> and almost simultaneously by the inclusion of "vitamin G" which was the original name for what is now known as vitamin B<sub>2</sub> or riboflavin. Thus the earliest pan-vitamin capsule was the A, B, D, G, combination.

With the exception of vitamin D, which may be toxic in excessive doses (and possibly B<sub>1</sub> on which studies are incomplete, but some recent experiments indicate that excessive intake may lead to the development of gallstones), the vitamins are not presently known to be harmful in even quite

large amounts. Exceptions may, however, become manifest as researchers carry on further work in this special field of investigation.

A great deal of evidence is at hand that vitamin deficiencies occur as multiple manifestations, rather than as a single symptom. Thus, it is believed that most diseases or syndromes (syndrome, a group of symptoms) that occur as a result of restricted vitamin intake are the result of a deficiency in several vitamins rather than in one. On this basis, the pan-vitamin preparations were manufactured and offered to the consumer as a sort of "shotgun" method of treatment, to use a term common in medical circles.

There is, however, an appreciably large dissent among experts from the view that all vitamins must be given together, and the idea is proposed, for the correction of a deficiency and even as a measure for preventing occurrence of a deficiency, that that group of vitamins should be administered, of which the deficiency is most apparent, or most likely to be manifested on a given type of diet. Such diets poor in a given vitamin may result in the inability to obtain a balanced diet, or it may be due to restricted intake of certain foods, required by physicians' advice, for the purpose of dealing with other pathologic conditions. A diet low in fats, for example, as prescribed for individuals with gallbladder disease, may be deficient in the fat soluble vitamins, A, D, and E. Patients on a dietary regimen which requires a high intake of carbohydrates, as required in treating some forms of thyroid disease, may develop a deficiency in vitamins of the

vitamin B-Complex, such as vitamin B<sub>1</sub>.

Inasmuch, however, as the vitamins are very widely used as a prophylactic or preventive measure, it may perhaps be best to use the product that contains all the vitamins on which the minimum daily requirements have been established. These are vitamins A, B<sub>1</sub>, B<sub>2</sub>, C, and D. It is a matter of interest and importance that the requirements set forth by the Food and Drug Administration are lower than the minimum requirements of the Committee on Food and Nutrition of the National Research Council, which is a quasi-governmental body composed of scientists of note.

The comments in this article unfavorable to the use of vitamins apply, of course, to the general and indiscriminate use by laymen on their own responsibility or because of advertising which they have read rather than their use in competent hands for therapeutic purposes, under medical advice or control. The undesirability of overuse or indiscriminate use of vitamins has been previously discussed on many occasions by medical investigators as Dr. Stare (*CONSUMERS' RESEARCH BULLETIN*, January 1944) and others.

This and the next article are not for the purpose of discussing general vitamin problems but rather to provide the detailed knowledge upon which the consumer can proceed to choose between vitamin preparations which he is taking under medical or other competent advice or direction, or otherwise.

Vitamins *are not foods*, and do not take the place of food, which is composed predomi-

nantly of carbohydrates, fats, proteins, and minerals. Foods serve as fuel in the body, and act as the building units from which normally tissue is built and through the agency of which it is normally replaced. Vitamins act in a fashion vastly different from foods, albeit just as indispensably as foods. They have been variously dubbed as catalysts, activators, etc. In their function they act either to *protect structure* or to *assure function*. Compared to foods, infinitesimally small quantities are needed, which are normally supplied by a diet which is balanced in the *quantity* of food intake as well as the *proportions* of foods of various types.

On these well established premises, it will be readily apparent that restriction of food, and substitution of vitamins for purposes of weight reduction are exceedingly fallacious. *Malnutrition can result, even with an adequate vitamin intake*, as well as with an unbalanced food intake. Vitamins are often prescribed by the physician concurrently with a diet for the reduction of obesity, and that delicate proportion among calories and the several vitamins should be worked out by a physician who is expert in nutrition and metabolism, not by a layman, or by an advertising agency working for any drug manufacturer.

Mineral elements are important constituents of our diet. They are supplied in almost all foods, as meat, fish, and vegetables; in smaller proportion in farinaceous or cereal foods; and in negligible quantities in fats. The ingestion of calcium, or of calcium and phosphorus, does not assure adequate mineral intake, for there is a definite ratio that must be observed for optimal effects. That

TABLE II

Commonly referred to as	Vitamin Synonyms
Vitamin A*	antixerophthalmic vitamin, epithelializing vitamin, integument vitamin, fat soluble vitamin, vitamin A <sub>1</sub> , vitamin A <sub>2</sub> , anti-infective vitamin.
Vitamin B <sub>1</sub> or thiamine hydrochloride*	thiamin, aneurin, anti-neuritic vitamin, antiberi-beri vitamin.
Vitamin B <sub>2</sub> or riboflavin*	lactoflavin, vitamin G, ovoflavin.
Vitamin B <sub>6</sub> or pyridoxine hydrochloride*	anti-acrodynia rat factor, adermin.
Nicotinic acid or niacin*	vitamin p-p, antipellagra vitamin, pellagamine.
Nicotinamide or niacinamide*	nicotinic acid amide.
Pantothenic acid*	vitamin f-f, filtrate factor, chick antidermatitis factor.
Vitamin C or ascorbic acid*	cevitative acid, antiscorbutic vitamin.
Vitamin D*	antirachitic vitamin, viosterol, activated ergosterol, vitamin D <sub>2</sub> .

\* Asterisk connotes name preferred in scientific circles.

ratio is found in most natural foods. Phosphorus, moreover, enters into the utilization of some members of the vitamin B-complex. A further appreciation of the inter-relationship among vitamins and minerals is gained by the consideration that in rickets the most important office discharged by vitamin D is in the making of the calcium of the body available for its use in the bony structure. Thus the well balanced diet will supply minerals, which do not normally have to be supplied in the form of tablets, except in some conditions such as pregnancy, when there is need for a sizable and immediate supply of minerals.

We all like to trade with the merchant whose reputation for integrity and quality are known to us. It is expected that this practice would be carried over by the consumer into his vitamin purchases. Whereas it is reasonable to believe that a

reputable brand is true to label and engenders an inner sense of confidence and dependability, it is usually but not invariably true that the unknown and unadvertised brand in interstate commerce is true to label, as to some extent, the Food and Drug Administration checks the represented potencies. One important factor that may be mentioned which has a bearing on this question is that nearly all of the brands in soft gelatin capsules are made by one manufacturer in Detroit, the Gelatin Products Co. which holds patents on capsule making machines that make highly uniform capsules and so assure accurate dosage. (That company does not sell direct to the consumer or to retailers.)

A statement invariably appears (or should appear) on the labels of capsules containing vitamin D. This consists of a declaration that the vitamin D

is either from *natural sources*, or is *synthetic*; in the latter case the legends *activated ergosterol*, *activated by low velocity electrons*, *calciferol*, *Speri process*, or *Steenbock process* may appear. This is a requirement of the Food and Drug Administration regarding the type of vitamin D used under the regulations relating to substances for special dietary uses of the Federal Food, Drug and Cosmetic Act. None of the substances having vitamin A activity have been synthesized up to this date (1943), and therefore only natural vitamin A is available.

As we are in a comparatively early stage of knowledge pertaining to the vitamins, there still exists a good deal of confusion regarding their natures, identities, and even their names. In the attempt to simplify the nomenclature and advise the consumer, a table of synonyms is given as Table II. A knowledge of the identity of the vitamins is helpful in the intelligent reading of advertisements, some of which may be deceptive unless carefully read, and unless one knows the synonyms and variations in the terms used. The term *potency* must be critically considered, for when a new product claims to replace all similar preparations of lesser potency, it does not mean, as one might suppose, that such a preparation becomes the outstandingly desirable purchase, but merely that it is more potent when compared with something less potent—an obvious enough conclusion, expressed rhetorically. The actual potency, and the need for that potency, should then be critically examined.

In evaluation of quantities, the labels of some products list the quantities in micrograms

or gammas, which gives the impression to the uninitiated that 1000 micrograms are much better than 1 milligram. The facts however are that 1 milligram (abbreviated mg.) is equivalent to 1000 micrograms or 1000 gammas (abbreviated γ, the Greek letter gamma).

On niacin and niacinamide (formerly called nicotinic acid and nicotinic acid amide, respectively), the Food and Drug Administration has not established what are the minimum

TABLE III—Conversion Table

Vitamin B <sub>1</sub>	1 mg. equivalent to 333 U.S.P. units
Vitamin B <sub>2</sub>	1 mg. equivalent to 400 Sherman-Borquin units
Vitamin C	1 mg. equivalent to 20 U.S.P. units

1 milligram (mg.) is equivalent to 1000 micrograms or gammas. U.S.P. (United States Pharmacopoeia) units and International Units (I.U.) are identical when applied to the vitamins.

daily requirements. As to several others, it has not even been established that they are needed in human nutrition, since experimental work was carried out with small animals and birds, such as pigeons.

There is little doubt, however, that they will have a place in medical practice, in time.

(A second article on this subject will follow in an early issue.)

## Use of Soda in Vegetable Cookery

SODIUM bicarbonate has been much used in cooking vegetables to decrease the cooking time required and to secure better retention of the normal fresh green color.

In every discussion of vitamins where questions of methods of cooking come in, we are cautioned against the use of baking soda in cooking vegetables, because the soda is asserted to destroy certain vitamins, especially vitamin B<sub>1</sub>. Various authors on nutritional and dietetic questions make the same point with respect to soda and its effect on vitamin C.

Recent experiments, however, throw considerable doubt on the widely publicized advice to avoid the use of soda in cooking vegetables. Fresh peas and two types of frozen peas were cooked for short periods with and without the use of sodium bicarbonate, with the result that it was found no greater amount of thiamine (vitamin B<sub>1</sub>) was destroyed when cooking with soda than when water alone was used. There was, however, somewhat more loss (to the water used in cooking) of the thiamine from the peas

themselves by leaching (extraction) out of the peas during the cooking, but even as to this, the advantage when soda was not used was not particularly significant. There was a greater loss of vitamin B into the cooking water if the peas were *overcooked* with soda until the hulls were ruptured, but there was a large loss of the vitamin with overcooking, whether soda was used or not.

The studies that produced these rather striking findings were carried out by Cornelius H. Johnston, Louise Schauer, Sam Rapaport, and Harry Deuel, Jr., at the University of Southern California Medical School. The upshot of their experiments was that there was no greater destruction of the vitamin B<sub>1</sub> originally present in the intact pea after cooking with soda than when water alone was used. The amount left in the peas after cooking was the same by either method of cooking. Use of soda, it was found, decreased the time of cooking from one-third to one-half (from 17 minutes to 8, for

fresh peas; from 6 minutes to 4 for frozen peas). The cooking process accounted for losses of 20% in thiamine, 35% in riboflavin, and 40% to 55% in vitamin C, figures which did not differ greatly when other tests were run with sodium bicarbonate (baking soda) added to the cooking water (in the proportion of a sixteenth teaspoonful [0.22 gram] per cup [180 cc.] of water). With fresh peas, the investigators found, when the vitamin content of the peas and of the cooking water were measured, that these together accounted for the total original vitamin content of the peas. With frozen peas, processed by the "tunnel method," this was also true; with frozen peas produced by the plate method, there was some loss of thiamine in cooking with soda.

The authors wisely recommend that reinvestigation be made regarding losses of vitamins with use of soda for other vegetables than peas, since their findings throw much doubt on the generalizations of previous workers on the amounts of vitamins B<sub>1</sub> and C lost due to methods of cooking.

# War-Grade



# Baby Carriages

**I**N PRE-WAR DAYS, when the automobile was in its heyday and gasoline was available in unlimited quantities, most parents preferred the folding or collapsible type of baby carriage because of the ease with which it could be transported in the trunk of the car. Today this degree of portability is not so important, except perhaps for apartment dwellers, yet manufacturers, faced with government restrictions requiring them to use substitute materials, appear to have found it expedient to make the folding carriages, in preference to the non-folding type. This is done at the sacrifice of needed strength and rigidity, with the materials now available.

The annual production of baby carriages is considerable, since there were nearly a million baby carriages and about the same number of baby carriage substitutes, known as strollers, walkers, and sulkies, scheduled for production in 1943. The products made under War Production Board restrictions are almost entirely of wood; in some only a few ounces of metal are used, generally for joints and hardware.

The baby carriage situation was very aptly summed up by one of the leading weekly picture-magazines, which said, "... a Victory model, using mostly wood and only six pounds of metal, was devised,

*METAL baby carriages within six weeks to replace the wooden Victory models were promised by the War Production Board in a press release on January 11, 1944. With this development, prices on Victory model carriages will undoubtedly be cut drastically to clear stocks on hand.*

This was so rickety that the government increased the metal allowance to nine pounds. Prudent mothers buy Victory prams (price, about \$40) only when they have abandoned all hope of finding a reconditioned old carriage." Unfortunately, with the large increase in birth-rate, there are not enough reconditioned used carriages to go around, and many parents have had to buy a Victory carriage or do without. (One source of supply for rebuilt carriages said "to look like new" is the Ace Baby Carriage Co., 4855 Broadway, New York City. Prices are from \$60 up.)

Consumers will not find a wide choice of Victory carriages available, as buyers for the stores are wary of stocking up on merchandise which they know will not be salable when products of pre-war grade are again available. As manufacturers and retailers in all lines of trade are afraid of being "stuck" with ersatz goods, they are much concerned not to have

too many of the war model baby carriages left on their hands now that the War Production Board has again authorized manufacture of all steel models and permitted a good-sized increase in the amount of metal that can be used. Manufacturers are not to blame for the present low quality of their baby carriages, for actually they seem to have been quite resourceful in overcoming the restrictions imposed upon them. They realize that a carriage of sorts is better than none, and they do not try to pretend that the "Victory" carriage is as good as a metal carriage.

One manufacturer attached a tag, called a "Conservation Tag," giving explicit directions for the care of the carriage to give its maximum life in service. Another manufacturer explained that their war-grade carriages cannot enjoy the guarantee previously given to their product. And one distributor says, "wood frames are not so strong . . . will not stand hard abuse; . . . if given proper care will last one or two years." At least one critic considers that some of the Victory-model carriages are unsafe to use. This situation would appear to be on the way toward at least a degree of improvement, in view of the recent announcement from WPB which indicates that it now expects to allow more steel for the manufacture of baby buggies.

Many parents are inexperienced in purchasing baby car-

riages and are further handicapped by lack of useful and informative material in the advertising of the various makes. With these considerations in mind, an engineer-consultant of CR carefully inspected and reported on various models of Victory baby carriages manufactured or distributed by each of the following:

Hewitt-Wakefield Gardner, Mass.  
Kroll Bros. Co., Chicago.  
Montgomery Ward, Chicago (catalog inspection only).  
Sears, Roebuck & Co., Chicago (catalog inspection only).  
Thayer Co., Gardner, Mass.  
F. A. Whitney Carriage Co., Leominster, Mass.

The greater portion of the carriages were of the English coach type. These consist of an undercarriage on which the wheels are mounted, and to which is also attached a pair of "Duchess" type springs. These springs, in turn, support a folding X-frame, to which the basket or body is attached. The baskets of all samples observed were made of artificial leather. However, some Victory carriages have all-wood bodies, which tend to make them heavy and unwieldy. The samples observed were almost all equipped with a removable wooden device in the basket which provided a firm base and a small storage space in the bottom.

Subscribers who must purchase one of the "Victory carriages" should first consider the following points and particularly observe the parts of the carriages subject to the most wear.

#### Wheels

These were found to be of three types, namely, wooden disc, wooden spoke, and wire spoke, the latter being the most desirable; there is a possibility that disc wheels will warp and wooden spoke wheels may

loosen and squeak, with use and changes in weather. All had tires of some rubber-like composition.

#### Axes

All axles were of the stub type, i.e., short metal rods inserted in holes in the undercarriage, and were secured with bolts or similar fastenings. While warping of the undercarriage will throw the wheels out of line, this construction is preferable to that used in a few samples where the axle is attached to the wood on the outside by means of staples. Some of the carriages claimed to have all-ball-bearing wheels.



#### Springs

The "Duchess" type springs have been made of metal, bent wood, cut wood braced or flitched (layered) with metal. In some makes there is no spring at all. A carriage should have steel springs to obtain adequate and lasting shock absorption, and there would seem to have been a poor use of available materials when the manufacturer adopted a metal push bar and bent wood springs. One manufacturer does without the springs entirely and connects the X-frame directly to the axle through the shackles, in this way, perhaps, indicating his low opinion of substitute spring materials.

#### Shackles

Many of the shackles, or links between the undercarriage and the X-frame, appeared to be of rather light metal. Other things being equal, the carriage with the heaviest shackles available should be selected. The pins at each end of the shackle should be at least  $\frac{1}{4}$  inch in diameter.

#### Wooden Structures

All wooden parts should be made of hard woods. Most undercarriages appeared to be sturdy; dimensions approximate 1 x 1 inches for these members. The X-frames were lighter in some cases but adequate. Some of the basket frames, usually bent wood, were quite light. One authority in this field believes that no essential member of the frame should be less than 1 x  $\frac{1}{2}$  inches in cross section. Select the most rugged-looking frame, if a choice is possible.

#### Folding Mechanisms

All were the same in principle, e.g., closing the X at the crossing of the legs by means of 3 pivots and a latch to hold the pushbar or handle in the open position. The latch should be spring-operated and the pivot points should have pins of at least  $\frac{3}{16}$  inch diameter, with washers at the joints to assist in maintaining ease of operation.

#### Brakes

All brakes were of wood, but a great number of types were offered. The heavier wood bars, linked at the center, seemed most durable, though a metal facing would eliminate wear. Metal parts were used in some of the brakes, particularly for the tension members.

## Hoods

Hood bows and stretchers were all of wood, in a great variety of shapes, the four-bow hood being the most desirable. All pivots should be of metal. The hoods were attached to the frame in two ways: the hood pivot was either a small metal bracket or a rather extended plate of plywood. The method using metal is much to be preferred.

## Pushbars

These were of both metal and wood. Wood is strong enough for the service to which this member is put, and metal could be used to far better advantage in other parts of the carriage. All metal pushbars were painted; this paint will wear off and the pushbar will rust unless more than ordinary care in maintenance is provided.

## Artificial Leather

War restrictions have undoubtedly lowered the quality of the artificial leather used for baby carriages. Pyroxylin finishes are difficult to obtain, and linseed oil varnishes, which will give less desirable surface coatings, are being substituted.

## Accessories

The carriages were provided with hood visors, straps, extension wells, drop fronts, wind shields and other variations too extensive to enumerate in detail. These varied with the price.

## Prices

With one exception, the carriages ranged in price from about \$21 to \$40. Twin models were slightly higher. The investigation suggested that, in

so far as inspection by the intending purchaser should reveal none of the faults against which readers have been warned above, the lower-priced models may as well be purchased. The best of the current offer-

ings in baby carriages are surely none too good, and there is little reason to expect sufficient extra value in the higher-priced makes to warrant the higher prices charged the consumer for them.

## Care of Baby Carriages



**B**ECAUSE the Victory carriages are inferior to pre-war models, special care should be given to them to attain maximum life.

¶**Lubricate** all moving metal parts occasionally with typewriter or sewing machine oil to prevent undue wear, and rusting or corrosion.

¶**Axles** should be well greased before using the carriage and thereafter greased every two or three weeks, depending on how much the carriage is used. It might be well to check the alignment of the axles when greasing them, for, if bent out of shape, undue wear of one or more of the tires will occur.

¶**Frequently dust** and brush out the carriage, paying particular attention to the crevices. Clean the upholstery, body, and hood with a sudsy solution of saddle soap or a similarly mild soap and warm water. Apply the suds with a clean, soft cloth and dry immediately.

¶**Wax** the wood parts occasionally with paraffin, beeswax, or floor wax, applying the wax with a soft cloth; don't let any touch the upholstery. This preserves the wood, makes the carriage more attractive, and provides a degree of waterproofing protection.

¶**Straps**, if of genuine leather, should be occasionally cleaned and then oiled with neat's-foot oil or harness oil. After the oil has been allowed to soak into the leather for a time, the excess should be wiped off carefully. (Any cloth used with such an oil or dressing should be burned or otherwise disposed of in a way so that it cannot cause a fire hazard due to spontaneous combustion.)

¶**Carriages** should never be overloaded with shopping parcels.

¶**Dry** all damp parts of the carriage before storing, and store in a clean, dry place, as dampness will hasten deterioration.

¶**A final precaution:** it is safest never to fold or unfold hoods in very hot or very cold temperatures; if very cold, the fabric may break or crack; if hot, it may stick. Keep the carriage at room temperature for a few hours before opening or closing to prevent injury to the fabric.

# *The Art of Sleeping*

By M. BECKETT HOWORTH, M. D.

SLEEP IS A particular variety of rest in higher animals, characterized especially by a partial unconsciousness, or rest of the higher centers of the brain. It is usually the best form of rest or relaxation, because it is the most complete.

The larger part of the brain rests during sleep. The sleeper is practically unconscious of and largely unresponsive to his environment. It is difficult to produce in him a response to external stimuli, but when he does respond he is apt to awaken. He may immediately return to sleep, or if the stimulus continues, he may remain awake. The brain continues to function subconsciously, however, and may not only dream but may work, e.g., solve problems.

The sensation of sight is lost when the eyes close; the muscles relax at the same time. Sensitiveness to taste and smell are reduced, and usually pronounced taste and odor stimuli are lacking in sleep. Hearing is usually the last of the senses to be lost, probably largely because the stimuli to hearing are more likely to be present, and because hearing has always been a protective sense to animals during sleep. The sense of touch is diminished, especially if the stimuli are constant and mild. Pain is more persistent, especially if variable. The muscle sensations of position and stretch are the most persistent, particularly when stimulated by strained positions or great fatigue. It is the muscle sensations which are more apt to keep a person

awake, and which are hardest to lose for people who have difficulty in sleeping. "Learn to relax" is no idle admonition.

The heart beat is normally weaker and slower during sleep, giving the heart and blood vessels rest, and the respiration is similarly more shallow and less frequent. Digestion and kidney function are also slower and milder, as is the whole metabolism (the processes of building up and breaking down in the body's cells).

## *Posture in Sleep*

Sleeping in the lying position in bed is more favorable to complete rest because it more nearly equalizes the effects of gravity, reduces muscular tension, permits easier relaxation, and reduces respiration. Persons with serious heart disease or shortness of breath, however, may have to sleep in a sitting or semi-reclining position. Hospital beds and certain chairs are built to permit this position. The semi-reclining position is often as comfortable as the lying one, but permits less variety of position because of the angulations in the chair or bed.

The sleeper may lie on his face, side, or back, the side position being most common. Infants often prefer the face-down position, usually with hips and knees flexed. The position of the trunk, and especially of the extremities, is usually changed many times during the night. A person may learn, however, to sleep in one position all night long, when so

required by an injury or operation.

## *Type of Bed and Mattress*

The bed should be flat and firm. Bed springs and inner-spring mattresses always sag, whatever the brand or construction. There is more sagging when they are used together, or made of weak materials, or are old. A sagging bed stretches the lowermost parts of the body and prevents proper relaxation. It often causes the sleeper to "curl up in a ball" in the center of the bed, not a favorable position. A sagging bed is warmer, for it tends to wrap around the sleeper, a disadvantage in summer. True, the sleeper is less apt to roll out of it, but with the sagging bed the bedclothes are more apt to become wrinkled or pull out.

The flat bed, with cotton felt or hair mattress and strong springs is better. A piece of wallboard (not Celotex) or wood, such as a piece of  $\frac{5}{8}$ -inch plywood, the length and width of the bed (at least 3 x 6 feet), between mattress and springs will prevent sagging, while permitting a certain amount of general springiness. Persons with wide hips, narrow waists, or having the condition called lordotic spine may require a small pillow or pad under the flank or lumbar spine to reduce strain in this region. The well-made sponge rubber mattress, now out for the duration, was usually firmer and flatter than the inner-spring mattress. It was easier to keep clean, but hotter, sometimes odorous, and

probably not so durable. A flat bed is particularly desirable for overweight persons, pregnant women, or people with backache. Pressure on bony prominences may be uncomfortable the first few nights, but few people who have tried such a bed for any length of time are willing to return to the soft variety.

The bed and mattress should be long enough, and wide enough for the individual's requirements. The standard 6 ft. 4 in. bed is long enough for the average adult, but a 7 ft. bed is desirable for a person over 6 ft. tall. The mattress should also be longer for a tall person. If a standard bed must be used for a tall person, it is better to have one without a footboard. The "rolled-edge" type mattress is preferable. Studio couches and cots are usually too narrow and soft, and should be used only as temporary makeshifts.

When necessary to sleep for a time on a semi-reclining chair, the chair should fit the individual, and support his head, trunk, thighs, and legs in a comfortable position, and it should have arms or side support to prevent the person's rolling out.

#### ***While Traveling***

Sleep in transit has become a very important problem to many in the past few months. Pullman berths are usually not long enough for tall people. Perhaps there will be some 7-foot berths after the war! One of the chief difficulties is the vibration, which is apt to be worse in the lower berth than the upper (the lower has a spring mattress), and which could probably be eliminated by a

different type of suspension. A few more dollars spent on design of berth details might add greatly to the comfort and rest of a night in a Pullman. Another sleep-chaser, particularly vicious on some trains, is the frequent switching and uncoupling of cars at junctions, with careless bumping and banging or loud talking by train crews (and often, too, by passengers) who are not trying to sleep.

Reclining seat coaches are much more comfortable for sleeping than old-style coaches, and a fairly good night's sleep may be had in them if the lights are low, and other passengers are quiet. A radio, portable or otherwise, will sometimes disturb a whole car full of would-be sleepers, for the questionable enjoyment of one person.

People who are ordinarily kind and courteous become extremely selfish (or unobservant) when they want a cigaret, and many people seem to think they must smoke when and where they please regardless of the effect on others. Often the air of the coach is foul and thick with tobacco smoke in cars labeled "No Smoking." Air conditioning, as operated, does not usually eliminate this condition. There are still many people, even adults, who do not smoke, and to them the constant breathing of the discarded fumes of others is particularly unpleasant, and may even provoke nausea, headache, and car sickness. There is a considerable content of carbon monoxide in the air of a car where much smoking is going on which may produce headache. Mild carbon monoxide poisoning tends to produce sleep, but in an undesirable and dangerous way.

The seats of the ordinary day coach are quite uncomfortable for sleeping, but a person sufficiently tired and sleepy may get some sleep by using pillows or coats and curling up in the seat or putting his feet on the next seat. Sleeping in busses presents similar problems, often with the added one of obnoxious gasoline fumes. Mild carbon monoxide poisoning from engine fumes often occurs, aiding sleep perhaps, but hardly conducive to good health. Passengers should insist upon enough ventilation to blow out such fumes, even at the expense of warmth.

#### ***Noise***

Noise may greatly interfere with sleep, but its effect varies with the kind of noise, and with the individual. A continuous sound is less disturbing than an interrupted one, a soft sound less than a sharp, strident or throbbing one. Combinations of sound are more disturbing than single ones. Unusual sounds, or those unpleasant to the individual, such as a neighbor's radio, or a tomcat on the prowl, are more troublesome. Loud talking on the street, taxi or truck motors warming up, and the clangor of early morning garbage trucks are apt to be especially annoying in the city; on the other hand the intermittent cry of the whip-poor-will, the croaking of frogs or the barking of watchdogs may keep the city sleeper awake in the country. People accustomed to sleeping amidst noise often find it difficult to sleep when suddenly moved to a quiet place. One should select his apartment or home with his noise preferences in mind. Many of the bedtime noises are unnecessary and could be eliminated

by a little thought and good-negligence. Motor-powered window ventilators or air conditioners equipped with sound-mufflers are helpful in excluding noise, but they are "out for the duration."

### Ventilation

Poor ventilation may be conducive to sleep, but is not conducive to good health. The air becomes charged with heat, moisture, dust, and carbon dioxide, and reduced in oxygen, and the resulting grogginess makes sleep easier, but the refreshing effect of sleep in clean dry air is lost. Poor ventilation of trains, busses, or hotel bedrooms is very troublesome to sleepers who are used to the clean fresh air of the country or suburb. Persons living and sleeping in overheated rooms (above 70°) are more susceptible to colds and other respiratory infections. Extreme cold and strong drafts, however, may interfere with sleep, and be less refreshing than a cool room with sufficient ventilation. The chilling effect of a strong draft is even greater than that of the cold itself. There is no advantage in sleeping in a very cold room with the covers over one's head. Covers should be of light-weight materials, such as down, wool batting, or loosely woven wool with a thick nap. They should be long and wide enough to be well tucked in when a person is in bed. Several layers are warmer than the same weight of material only one layer thick. Woolen night clothes are warmer than cotton or silk, but the coarser varieties may cause itching of sensitive skins. Feet should be covered with socks or long pajamas in extreme cold, or for individuals with poor circulation. A hot-

water bag, heating pad, or heated brick or stone (wrapped in cloth) may be used near the feet if necessary. The old-fashioned bed warmer is still useful where modern heating facilities are not available. Sleeping bags are warmer for their weight and thickness than other covers and harder to kick off. Cold may come up through the bed when the mattress is thin or loose; this may be eliminated by using newspapers or blankets under the mattress, or under the lower sheet. Debilitated or aged persons and young infants should be kept warmer than others. The reader is referred to manuals on camping and woodcraft, such as that of Kephart<sup>1</sup>, for suggestions on achieving comfort in sleeping out-of-doors.

### Other Difficulties

Unpleasant tastes and odors rarely interfere with sleep, and the remedies are fairly obvious. Further, these senses are easily fatigued, and soon the unpleasant effect is hardly noticed. Excessive heat or cold may interfere with sleep and should be avoided if possible. Good ventilation of course helps to minimize the effect of extreme hot weather. A fan should not blow directly on the sleeper, but rather just above him, and the fan used should always be of the oscillating type. It is necessary that non-oscillating fans (if they *must* be used) be placed with the greatest care even in the hottest weather to avoid a continued steady draft—even a slight one—on the person. The body is physiologically incapable of maintaining its proper temperature adjust-

ments for long periods in a steady draft, whereas with a mild draft which fluctuates in direction and intensity, the body's temperature-control is able to function properly. Sponging with water or alcohol reduces temperature by evaporation. A cold bath or drink reduces surface temperature, but only temporarily, for it causes the body to retain and produce more heat. A warm bath or alcoholic drink causes the skin vessels to dilate and increases heat loss. The "warm glow" caused by this dilation is quite deceiving, and it is on this account that alcoholic drinks may be dangerous when one is exposed to cold.

A heavy meal tends to favor sleep, because of its large demands on the circulation and the resulting muscular relaxation. Prolonged digestion time, however, may result in disturbed or restless sleep which is not as beneficial as normal sleep. Alcohol and tobacco, being depressants, tend to favor sleep, while tea and coffee, being stimulants to the brain, heart, and kidneys, tend to encourage wakefulness. Poor sleepers should not drink tea or coffee in the evening.

Itching may interfere with sleep. It is most commonly due to a dry thin skin, affected by some irritant. Certain washing agents used on bedclothes or linen may be irritating. Coarse soaps or those containing free alkali that have been used on the skin itself may have the same effect. Exposure to cold, dry, windy air is likely to make the skin sensitive, especially the exposed parts of the body; likewise frequent hot baths. Babies' skins are irritated by wet diapers. Coarse material for clothes, bedclothes, or bed linen, especially

<sup>1</sup> Camping and Woodcraft, by Horace Kephart, The Macmillan Co., N. Y. C. 1927.

if woolen, is apt to be troublesome. Correction of these conditions should be attended to first. A change of clothing or bedding or of the soap customarily used for toilet or laundry often helps.

#### To Take or Not to Take

Pain may prevent sleep. Pain should not be treated with drugs, except when prescribed by a physician. Abdominal pain may mean appendicitis, chest pain may mean heart disease or pneumonia, headache may mean sinus trouble or some serious disease, joint pain may indicate arthritis or even tuberculosis, a "bruise" may mask a fracture or dislocation. Any persistent or recurrent pain of unknown or uncertain origin calls for careful medical examination, diagnosis, and advice.

Cold, such as an ice bag or cold compresses, may reduce the pain of a recent injury. Heat, such as a lamp, electric pad, hot bath, or hot towels may soothe the pain of an injury older than 24 hours, or of mild arthritis.

There are many drugs and patent medicines on the market for producing sleep. None of them is altogether satisfactory or safe. After all, they are drugs, and act by their mildly toxic effect, or some interference with normal bodily function. Some of them are definitely dangerous and harmful, especially when used over a period of time. Certain persons are sensitive to some of them, and not only may be harmed, but may find them ineffective in inducing sleep. There is a tendency to use drugs to disguise or escape a mental or emotional disturbance. This may be advisable occasionally under extreme con-

ditions, but the practice is often abused, and even becomes habitual. Drugs for sleeping should be used only on medical prescription, and no longer than absolutely necessary.

#### How to Relax

The war has added many sources of insomnia—dislocated homes, worry over loved ones, the necessity of sleeping at unusual times and in unusual places, travel, changed working conditions, great fatigue, even faulty diets, poor food, and bad cooking. There is no simple formula for sleeping under such conditions, but certain suggestions may help.

One of the chief values of sleep is physical rest, and this may be obtained without sleep to a large extent if necessary. Relaxation in the reclining position has almost the same beneficial physical effect as sleep. A few minutes of recumbency after lunch is often desirable, or even two or three rest periods daily. One may rest in a quiet place in a comfortable chair. The average adult should have about eight hours of sleep nightly, children more. Relaxed rest in bed may be counted as sleep. Those doing hard physical work or sports require more sleep, people whose occupation is sedentary, less. Persons subject to considerable nervous or emotional tension may require more sleep. Convalescents and others in poor physical condition may require more sleep, while those continuously in bed but not really sick often require less. If those who do hard work or who are under tension, however, get adequate rest periods during the day, they may not need extra sleep.

Trying to go to sleep is prob-

ably the hardest way to do it. The principal aids to sleep are: to have a suitable bed, remove disturbing stimuli, and relax, when sleep will come. Watching the clock, worrying about one's sleep does not help. Monotonous distractions such as "counting sheep" may help. Relaxation before bedtime may be promoted by a little exercise, a hot drink, warm bath, warm bed and room, a dull book or conversation, certain types of music, and a comfortable position for reading or rest. Perhaps the most difficult thing to overcome is "thinking," whether it be solving problems, worry, emotional conversation or argument, or a review of some of the day's experiences. Probably the best relief for the problem is to face it squarely and finish it. If one is relaxed in bed, sleep may not be so important as getting rid of the problem. But if the problem only goes around in circles, and seems to come to no conclusion, it is often better to exercise, read, or listen to music. Relaxation may also be difficult, particularly for tense people, or those subject to recent excitement. The excitement can often be avoided, but relaxation may have to be taught—by a physiotherapist, orthopedist, psychologist, or psychiatrist.

Sleep, then, is a normal, healthful, and necessary activity, ordinarily requiring no thought or effort, and enjoyed by most people. It may be prevented or disturbed by a variety of things, mostly man-made, which can usually be avoided or eliminated. It can even be indulged in to excess, not only to the detriment and loss of time of the sleeper, but even to the disadvantage of others.

HAIR LACQUER preparations have come into vogue, due to the upsweep coiffure, in which they serve by keeping straggling hair in place. There have, however, recently appeared several references in newspapers and magazines pertaining to unfortunate results experienced by women from their use. The unlooked for difficulties were manifested in the form of an unsightly and annoying rash, and by itching and swelling of the neck or face; occasionally these became alarming enough for the sufferer to seek the advice of a physician.

Although only a comparatively small number of cases have been reported in the medical press, it is reasonable to assume that many more of such mishaps were experienced by women than have actually come to light by publication. These unreported cases were probably not severe; in some cases, perhaps, the victims of this hair lacquer irritation did not consult a physician.

Hair lacquer is an alkaline solution of gums, resins, or shellac in water. It is sprayed on the hair by means of an atomizer after the coiffure is finished, to hold it in place. The hair lacquer pads are merely small cotton or felt pads which have been impregnated with hair lacquer, and are in appearance very much like the cooling and cleansing pads impregnated with eau de Cologne, which were popular two or three summers ago. The lacquer pads are used by putting the hair up and literally varnishing hair stragglers to the coiffure proper.

Two brands of hair lacquer pads were found to be the cause of this skin irritation. Both were distributed by Chicago firms, namely *Hubère Lacquer*

# Hair Lacquer



By ERWIN DI CYAN, PH. D.

*Pads* distributed by Hubère Cosmetics and *Locks-Up Hair Lacquer Pads* distributed by Parfait Powder Puff Co. The Food and Drug Administration has made seizures of both of these, and the manufacturers have recalled from the market wherever possible, the hair lacquer pads which came from the batches that gave trouble. This incident affords a timely example of the reason for not allowing the beautician to sell one the application of some cosmetic, just because it is "something new."

Hair lacquer pads have been used in the past without difficulty, when shellac was the base. As to the reason for the irritation caused in the cases reported, the Food and Drug Administration suggests that it is possible that interaction between one of the gums and an alkali used in hair lacquers may have created a change in the composition of the product and sensitized an individual; hair lacquer irritation is thus considered an allergic response to a highly sensitizing resin, one of the ingredients.

Dr. Louis Schwartz of the U. S. Public Health Service, who is one of the top-ranking authorities in the realm of toxic reactions particularly as found in skin injuries, believes that the offending agent was a

. . . synthetic resin made from a combination of rosin and fumaric acid in one instance, maleic anhydride, rosin, and ethylene

glycol, in the other. The resulting compounds were used as a substitute for shellac, which was no longer obtainable.

Regarding the mechanism of the toxic reaction, the evidence at hand from many sources appears to point to a sensitizing reaction to a substance which has a high capacity for this type of effect on the skin. It is a known fact that there are people who have a tendency to allergic reactions arising from contact with many substances.

On the other hand, some substances are known to be high on the list of causes of allergic reactions. Familiar examples in the field of food allergies is afforded by the case of strawberries and melon; it is a matter of common observation, that many more people are sensitive to strawberries than to melon; and exceedingly few if any are sensitive to the gelatin in *Jello*. In further proof of the belief that the mechanism responsible for this irritation is an allergic reaction, it has been demonstrated that the "patch tests" made upon women who were subject to the irritations were positive. The period of appearance of the wheal in these patch tests which indicates a positive reaction, appeared after the same length of time as found in cases of other allergic conditions.

Dr. Harry Keil, a New York dermatologist, brings to attention a parallel to this hair lac-

quer irritation: a similar reaction occasionally has been experienced by the wearers of underwear, which is often given a resin finish or dressing. He believes the mechanism of irritation to be one of sensitiza-

tion as just indicated. It has been further noted, in cases of sensitization to nail lacquer, that sensitization is present to all brands of nail lacquer; but the person sensitive to *nail* lacquer is not necessarily sensitive

to *hair* lacquer. As hair lacquer sensitivity has occurred with more than one brand, it becomes apparent that a wartime substitute ingredient of some sort common to the formulas used, is causing the trouble.

## Weatherstripping

**WITH FUEL** increasing sharply in cost, and increasing still more sharply in difficulty of keeping a normal supply in one's bin, it is by no means too late for the householder to search diligently for any expedient that will help reduce his fuel consumption. The first step that should be taken in this direction is to inspect carefully all doors and windows, and when air leakage is present, apply weatherstripping, for weatherstripping *will save more per dollar of expenditure than any other heat-saving measure*. It also reduces discomfort by eliminating drafts, and layers of cold air at the floor level. In addition to weatherstripping outside doors and windows, inside doors which lead into cold spaces such as the basement, and the bedrooms where windows are opened and heat is turned off at night, should also be weatherstripped.

The consumer's first question is, "What kind of weatherstripping shall I use?" A walk through any 5-and-10-cent store will disclose many varieties, and the hardware stores will offer many more, in better grades at higher prices. One of the most important qualities of good weatherstrip material is its resistance to deterioration by ordinary atmospheric conditions and time. This of course cannot be determined by any quick method, and certain results of tests now being made by CR will probably not be available for a year or more. Preliminary data however should be of considerable interest to every homeowner.

Even the poorest quality of

weatherstripping will serve for a limited time, but the labor of installing it will not be worth while, if its service life is short.

In the following listings, which are tentative and preliminary, the weatherstrippings have been divided into types with a very brief discussion preceding each. Prices given in parentheses are per foot, for comparison purposes.

### Felt and Hairfelt Type

The light, thin felt strips sold at the lowest prices soon stretch, stick to the paint, pull out of shape, or break, and may have to be reapplied the second year or sooner. The heavier felts and some of the hairfelts are stronger and should be satisfactory for a longer time.

### B. Intermediate

*All Felt*, Cat. No. 84-4753 (Montgomery Ward) 25 ft., 64c plus postage. (2.7c) 1 in. wide, 3/16 in. thick. Thick, resilient.

*Bosley's Ajax Hairfelt*, Cat. No. 84-4773 (Montgomery Ward) 20 ft., 9c plus postage. (0.7c) 5/8 in. wide, 5/32 in. thick.

*Sears*, Cat. No. 9-7494 (Sears, Roebuck & Co.) Felt, 100 ft. with tacks, 53c plus postage. (0.6c) 5/8 in. x 1/16 in.

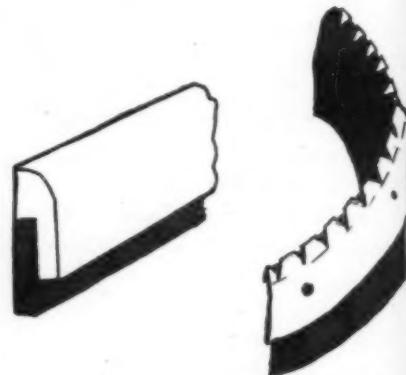
### C. Not Recommended

The first three might be suitable for forcing into fairly large cracks such as are present in badly fitted windows. For this use they might warrant a *B* rating.

*Heavybilt Felt* (Thermwell), 20 ft., 10c (0.5c); *No Draft* (Felters), 20 ft., 10c (0.5c); *Ward's Nufelt*, Cat. No. 84-4768 (Montgomery Ward),

100 ft., 67c plus postage (0.8c); *Heavybilt Hairfelt* (Thermwell), 20 ft., 10c (0.5c), very low tensile strength.

### Felt with Metal or Wood Backing Strip



This type of weatherstripping, while more expensive than the ordinary roll type, is stronger, easier to apply in a neat, workmanlike manner, and presents a better appearance. The backing may be wood or metal. This backing helps greatly with the nailing and prevents pulling out or loosening of the strip. Some of the following may later warrant an *A* rating.

### B. Intermediate

Wood strip, except *Nu-Way*.

*Wards*, Cat. No. 84-4788L (Montgomery Ward) 79c plus postage. (3.7c) Set of 7 wood strips each 42 in. long, 3/4 in. wide for windows.  
*Wards*, 84-4784L. 9c plus postage. (4c) One strip 42 in. long, 3/4 in. wide for windows.

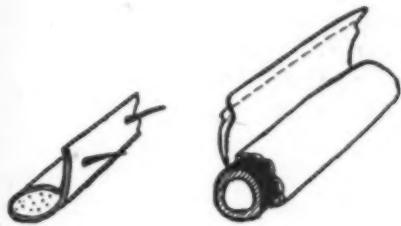
*Nu-Way* (Macklanburg Duncan Co., Oklahoma City, Okla.) 20 ft., \$1. (5c) 5/8 in. wide, 3/4 in. thick with white or bronze metal backing

strip having V-notches in top edge of metal and nail holes  $1\frac{1}{4}$  in. apart. Supplied with nails and a gauge to facilitate installation. Easy to apply, neat. Probably best buy in semi-permanent weatherstrip for most purposes.

*Wards*, Cat. No. 84—4787L. 95c plus postage. (5c) Six strips each 42 in. long, 1 in. wide for doors.

*Wards*, Cat. No. 84—4785L. 12c plus postage. (4.8c) One door strip 42 in. long, 1 in. wide.

#### **Round-Edge Type**



This type of weatherstripping, one most commonly found in 5-and-10-cent and hardware stores has a padded cylindrical contact edge about  $\frac{1}{4}$  in. in diameter, covered with dull or glossy waterproofed (coated) fabric or cloth, the cloth being extended for about  $\frac{1}{4}$  in. to form a flange or strip for nailing or tacking. These possess little elasticity, and it is doubtful

whether any of them can stand long exposure without serious deterioration. Another form of the round-edge type has a rubber composition tube of very low grade covered with a woven fabric. For the present we advise consumers to avoid use of weatherstripping made with rubber.

#### **C. Not Recommended**

No Brand Name (Sold by 10-cent stores, mfd. by Backstay Welt Co., Union City, Ind.), 4 ft., 10c (2.5c), covered with waterproofed (coated) fabric with nailing strip stitched together; *Seal-Tite* (Backstay) (3.3c), one sample covered with shiny coated cloth, with tacking edge stitched together, the other with dull-finished coated cloth, tacking edge cemented together.

#### **Paper Tape**

##### **A. Recommended**

*Heetsaver Weatherstrip Tape* (Soilicide Laboratories, 51 James St., Montclair, N.J.) 150 ft., 50c. (0.33c) One inch wide. Gummed paper tape usable on windows that need not be opened. Low cost, ease of application, and good appearance when applied to the inside of the window makes this an attractive method of stopping air leakage. Judged much

superior to Scotch tape for this use, and about half as expensive.

#### **Sponge Rubber**

Rubber weatherstripping of this type cannot at present be recommended, as it could only be satisfactory so long as it retains its resilience, which will usually not be long.

#### **Plastic Strips**

These products which come in the form of putty-like round strips,  $\frac{1}{4}$  in. in diameter, although sold also for weatherstripping windows, are more suitable for sealing cracks around foundation walls, cracks between window frames and walls, etc. They are usable on windows and doors that are never to be opened, but may cause difficulties in catching dust, and trouble in cleaning off properly when repainting becomes necessary.

##### **B. Intermediate**

*Mortite* (J. W. Mortell Co., 540 Burch St., Kankakee, Ill.) About 80 ft., \$1.25 prepaid. (1.6c) A gray plastic putty.

*Mend-O-Lastic* (Fennia Laboratories, River Grove, Ill.)  $5\frac{1}{4}$  ft., 10c. (1.7c) Brown.

## ***A New Metal Cleaner and Polish***

### ***"Samae"***

The ingredients of *Samae* are inexpensive, being a finely powdered siliceous and abrasive material (about 90%) and a phosphate of soda (about 10%). It is evident that in selling this product at 69c for 12 ounces including dispenser (a glass bottle with a cap made of red plastic), or \$1 for a two-pound refill, the manufacturer of *Samae* is providing an ample margin for advertising and distribution costs. The reason for the use of monosodium phos-

phate in the mixture is not clear, although this salt, owing to its mild acidity, may have a slight cleaning or etching action on metals.

The directions call for the use of *Samae with soap* in cleaning aluminum. As a cleaner, the product seems not to be particularly efficient and gives results in practical use that are little if any better than would be gotten with one of the well-known and popular kitchen cleaning or scouring powders selling at about 7c for a one-pound container.

# Heating Equipment—Necessary Safeguards

UNDER the present fuel shortage many people will be forced to use some sort of auxiliary heating equipment to keep warm this winter. Much of this equipment will be secondhand and probably defective, and there is a strong likelihood that it will not be safely and expertly installed, due to the shortage of the type of skilled labor required. Furthermore, much of such equipment will be used in homes whose occupants have become so accustomed to modern central heating appliances, many of them practically or nearly automatic in action, that they will have no familiarity whatever with the simple problems encountered in the operation of such devices as coal-heating stoves, electric, oil, or gas heaters.

Don't be deceived by the apparent simplicity of an appliance, in the assumption that it involves no element of hazard. An ordinary coal or wood stove improperly handled can cause death due to carbon monoxide poisoning just as certainly as can a leak from a gas pipe. An electric, gas, or kerosene heater can very easily start a fire. When it is realized that *in normal times* 20% of all fires are caused by heating devices, the need for caution, under the exceptional conditions of the present period becomes apparent. If the following suggestions, based on advice issued by a New York insurance underwriting company, are adhered to and constant care is employed in the use of these temporary heating units, the risk of fire

will be very much diminished.

## Electric Portable Heaters

Because the overall heating effect obtained from electric portable heaters is small, many people assume there is no danger of setting nearby combustible articles on fire. Actually, the heat directly radiated is of high intensity, hence the heater should not be pointed at such combustible objects as walls, partitions, furniture, clothing, curtains, draperies, and other similar objects, unless at least 10 feet away; even then the heater should be moved occasionally to prevent these objects from becoming too hot for safety. Very special care needs to be taken in this respect where there are young children, for a child may easily change the position or direction of the heater unknown to the parent and set up an extremely hazardous condition where a curtain or even a partition may be set on fire. No electric heater should be used with a frayed heater cord, nor should the heater cord be allowed to pass beneath a rug or under a door. Any defective cord should be repaired without delay.

## Coal Stoves

The stove should first be checked to see that it is in good condition and properly supported on legs at least 4 inches high, with the floor underneath protected from heat radiation from the bottom of the stove and from hot ashes that may fall, by a piece of asbestos board or thick sheet metal extending beyond the stove on all sides and at least 18 inches in the

front. The stove pipe should be free of rust spots and all joints should be air-tight and securely cemented into the chimney, so that it cannot be blown out in case of a puff-back due to a sudden accumulation of gas over the fuel. No point of the smokepipe should come closer to the ceiling than 18 inches, and if the pipe passes through a partition built of combustible material, a double-walled metal ventilated thimble, at least 12 inches larger in diameter than the stove pipe, must be installed. (This can be 8 inches instead of 12 inches larger if the annular space between the two walls is filled with rock wool, an incombustible insulating material.) Heating supply dealers, plumbers, and hardware stores should be able to supply such a ventilated thimble. There should be no combustible objects nearer than 18 inches from the sides and rear or 4 feet from the front of the stove. Soot accumulates in smokepipe and chimney, especially with use of soft coal. When there is a very hot fire, this carbon may ignite and burn at a furious rate making the smokepipe red hot. This causes many fire "scares" and some actual fires in attic or on roof. A stove should never be left unattended when it has a full charge of fuel and the draft is set in the open position. Ash removal should be in metal pails or cans. Since a hot bit of ash or cinder may be blown from the pail or container in a sudden gust of wind and ignite some combustible material, it will be on the side of safety to

have a metal cover on any such container.

### ***Oil and Kerosene Stoves***

Precaution in use of these is essentially the same as for coal stoves except that it is not necessary to have the metal or asbestos sheet extended as far out in the front. Such heaters should be carefully checked and cleaned at frequent intervals. The portable type of kerosene heater should never be left unattended in a room, for such a heater for no apparent reason may suddenly show a marked increase in the size of the flame, emitting a black oil smoke which can cause considerable damage to walls, ceiling, and contents of a room. When this change in the character of the flame occurs, serious overheating will automatically follow and unless the stove is promptly turned out or carried outdoors a dangerous explosion can occur.

Fuel storage is important. The kerosene or oil should be stored in drums with tight, non-leaking spigots, *well away from the house, if possible*. The safest method of storage is in a drum with a hand pump for raising the oil to the top of the drum and out a bent pipe into the container. If stored on the porch, as is often done for convenience to facilitate the obtaining of fresh supplies of fuel in wintry weather, a tight metal drip pan should be placed under the spigot to protect the wood floor from drippings of oil, which would result in a fire hazard.

### ***Gas Room Heaters***

Connections should always be made with *threaded metal pipe*. Flexible metallic tubing often becomes leaky without notice, and if it does leak, will

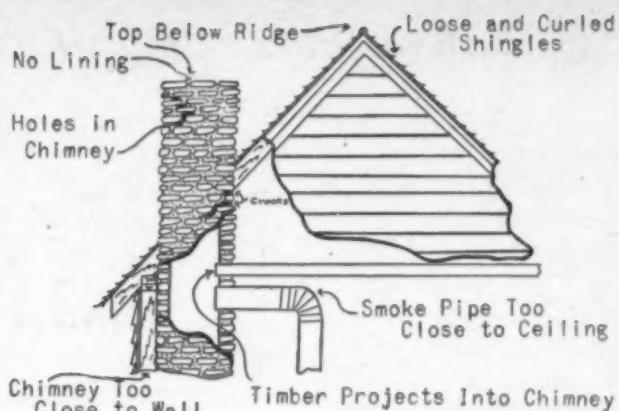


Diagram showing various defects often present in house construction which cause fire hazards.

introduce a very serious hazard not only of fire, but of explosion, or of asphyxiation. Rubber and all other flexible connections to gas heaters are definitely dangerous and should not be used, even in emergency. Gas-burning room heaters should be vented, so that products of combustion do not enter the room.

### ***Open Fireplaces***

A fireplace that has not been recently used should have the chimney cleaned, checked and repaired before any attempt is made to use it. Many homes have been burned down with fires originating in the chimney, either due to cracks permitting live sparks to escape into the woodwork or frame of the house or from the ignition of wooden beams that have very often been built into the chimney by an ignorant or careless contractor or workman, and are exposed directly to the path of the hot gases and flames. The hearth should be well-cemented and tight, and the stone, brick or tile should extend 2 or 3 feet beyond the front of the fireplace. A fireplace screen is not a luxury but a necessity, and the use of a fine-meshed screen which covers the entire fireplace opening is essential to

keep sparks and bits of burning wood from "exploding" into the room. As in the case of other types of heating units already discussed, combustible objects must be kept well out of the path of the radiant heat, for objects near a fireplace containing a very hot fire can easily be heated to a point where cloth, paper, or kindling can be ignited. Paper and kindling used for starting the fire must be put well to the side of the fireplace so that they are "out of sight of" the flames. Be careful not to build too large or too fast a fire in any case. Such a fire is very inefficient even under the best conditions. An ordinary fireplace works at only about 10% efficiency, whereas a good stove or room heater may achieve an efficiency of 50% or more. Central heating plant efficiencies may run from 50 to 80% depending upon the equipment and its adjustment. Fireplaces, however, can be very useful in saving fuel in mild weather, as with their use, starting of the main heating plant can often be avoided when the occupants of the house limit themselves to the use of one or two rooms. Circulating air fireplaces may be slightly, although not very greatly, more efficient than ordinary fireplaces.

## *Subscribers' Clippings Appreciated*

MANY of our subscribers have been extremely helpful in sending in from time to time important items of consumer interest, and some go to considerable trouble to furnish clippings from newspapers and magazines covering a wide range of topics of interest to our staff and subscribers. We are very appreciative of this help. In clipping for our use, it is important to identify an article or editorial, as soon as it is cut, to show the newspaper or magazine and its date. (If possible leave attached to it the journal's name and date as actually printed on the page, if they are shown, unless it is a newspaper page, where this may sometimes be inconvenient.)

Labels, catalogs, or circulars showing unusual items, and especially copies of letters from dealers or manufacturers regarding subscribers' complaints of defects on articles purchased, and relating to guarantees or advertising claims, are often valuable to us—may provide an interesting point or suggestion to add to an article in CR's BULLETIN. Some of the most interesting information is obtained from trade journals in special fields of trade and industry, which not infrequently disclose valuable clues to new developments or trends, or discuss matters which suggest means by which the consumer can avoid losses due to dishonest or unfair sales tactics of advertisers and salesmen. Members of CR's staff read many such journals, but there are thousands altogether, and many that we do not see sometimes contain items of consumer interest. Newspaper clippings are, of course, especially use-

ful when the item is one of chiefly local or regional interest (since nationally distributed news items emanating from Washington, New York, and

other great centers, are ordinarily picked up by us in the several metropolitan newspapers which we cover regularly in our reading).

### **Binders for CR's Bulletins**

**T**HE FOLLOWING BINDERS, suitably imprinted for Consumers' Research material are available to subscribers at cost plus a small handling and mailing charge:

#### **Black Fiberboard Binder**

A durable, fiberboard binder, with *Acco*-type metal fastener for securing the BULLETINS. 35c postpaid (Canada, 45c). This binder can be used only with BULLETINS that are drilled or punched (2 holes needed).

#### **Imitation-Leather, Non-Flexible-Cover Binder**

Uses simple device of straight wires for securing the BULLE-

TINS, and does not require that they be punched or drilled. \$1.25 postpaid (in Canada, \$1.50, on account of extra postage and clerical work due to customs papers). The wire-type binder has two advantages: it permits the BULLETINS to open flat, and it reduces wear on them—important when they are much handled by frequent reference.

Either type of binder easily holds a full year's issues of CR's BULLETINS. The fiberboard binder is thinner than the other but will hold 18 of the monthly issues.

### **New Zenith**

**T**HE ADVENT of the *Zenith* Hearing Aid at \$40 is an event of prime importance to the hard of hearing, for it makes available for the first time an instrument of good amplification at a price which the average consumer can afford.

Results of tests being made for CR will be reported soon. For the time being, the following, for which we are indebted to Mr. Percival Wilde of New York City, is given, as a summary of the tentative findings: (1) While the new *Zenith* appears not to be the equal of the highest-priced aids, because of the amount of extraneous noise at large amplifications, it is

### **Hearing Aid**

considered to be superior to any other hearing aid selling at \$125 or less; (2) where the user's hearing loss is severe, a hearing aid at a higher price which preserves clarity throughout its range may still be necessary; where the hearing loss is moderate, as it is in most cases, the *Zenith* should be highly satisfactory; (3) at present, the *Zenith* is supplied only with an "air-conduction" receiver, that is, a miniature telephone receiver which is worn in the ear; it is expected that a "bone-conduction" receiver, preferred by many sufferers from catarrhal types of deafness, will be supplied as optional equipment in the future.

# A New Shine Remover for Fabrics

RECENT advertising has prominently featured a new product called *Shyn-O-Way*, "the laboratory tested formula that permanently takes the shine off your clothes." It is advertised to remove the shine from woolens, overpressed rayons, children's clothes, pants, skirts, jackets, shabby upholstery. *Shyn-O-Way* is said to be the invention of a university professor of chemical engineering. According to the laboratory tests mentioned in the advertising, *Shyn-O-Way* is said to do its work without injury to the fabric, provided the fabric is not one that would be affected by wetting.

Prior to the advertising of *Shyn-O-Way*, the recommended method for removal of shine from garments was sponging with ammonia (one tablespoon of ammonia to one quart of water) or hot vinegar. After sponging, the garment was covered with a dampened cloth and pressed on the right side. Another method sometimes suggested was brushing against the nap with a stiff brush or rubbing very lightly with 00 sandpaper or very fine emery paper, using a circular motion.

Analytical data received on *Shyn-O-Way* indicate that the manufacturers of *Shyn-O-Way* "have a good thing" from the profit standpoint, since *Shyn-O-Way* turns out to be 99 $\frac{3}{4}$  percent water. Its other principal ingredients are disodium phosphate (1/5 of 1 percent) and synthetic sulfated organic detergent, a product of character similar to the well-known *Dreft*, but only 1/20 of 1 percent of this material is present. Since the synthetic detergent

(worth about 80c a pound) is present in such very minute quantity, and since disodium phosphate is a very inexpensive material (worth at wholesale rates perhaps 10c a pound at the most), it seems that *Shyn-O-Way*, priced at \$1.50 a pint, must be included in that fairly long list of chemical products of which the bottle, label, costs of selling and advertising, and transportation to the dealers' stock might cost a good deal more than the preparation itself. The ingredients cost for a pint bottle of *Shyn-O-Way* would figure out to be something like 1/16 cent.

Tests were made on crepe rayon and on wool suiting using *Shyn-O-Way* and also for comparison a 1/5 percent solution of *Ivory* soap. Both of these were effective in removing shine, particularly with the rayon, but they were not so efficient with the wool suiting, and little difference was noted in the action of *Shyn-O-Way* and the soap solution when used according to *Shyn-O-Way* directions.

In another study, practical comparative tests were made on wool garments of the use of *Shyn-O-Way* and of the hot vinegar already mentioned. Both methods had the same effectiveness initially, and with both methods the shine returned after five days of wearing of the garment. A 0.2% (a fifth of 1%) solution of *Lux* flakes (approximately 1 level teaspoonful per gallon of water) was also tried and this was found to do as good a job of de-shining the seat of the gentleman's trousers as *Shyn-O-Way*. This latter treatment would seem to

be fairly closely equivalent to *Shyn-O-Way* since that preparation has chemical properties similar to those of a weak solution of soap, the function of the disodium phosphate in the mixture being apparently to make the liquid moderately alkaline.

Trousers that had been de-shined with soap solution, like those treated with *Shyn-O-Way* or vinegar, resumed their original shiny appearance after five days of use. The experiments indicated that the three methods of treatment (*Shyn-O-Way*, vinegar, and soap solution) gave pretty much the same results, and none of the methods appeared to have any particular advantage compared with the others.

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† (dagger) in the above indicates that brand listings are included.

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# Rubber Footwear

TODAY rubber footwear is all of the so-called "war," "duration," or "victory" quality, which implies that the rubber used in the soles and heels is inferior to pre-war merchandise. CR's tests, just completed, would indicate, however, that the quality of construction has suffered more from changes brought about by wartime shortages of labor and material than has the quality of the rubber. Actually the rubber was not significantly inferior to the rubber in footwear tested by CR in 1941. This is due to the fact that rubber footwear of this type never has been made of very high-grade rubber compounds. Most manufacturers, not wishing their goods to receive a bad name undeservedly, enclose a slip stating that their footwear is necessarily less durable and serviceable than their regular quality and that their usual guarantees do not apply.

For children's rubbers the reduction in quality will not be as important as for adults, as children, at least those using the smaller sizes, usually outgrow shoes and rubbers before they are worn out. For this reason low-priced rubbers of below average quality may not be an undesirable purchase. When goods are manufactured under the abnormal conditions that obtain today, there is a tendency to produce goods pretty close to one quality level, and that a pretty low one, for competition is no longer an important factor in motivating designing and manufacturing

personnel. The present test, however, proved that this general rule does not always apply, for two samples, the U. S. men's overshoes and the *Servus* women's galoshes were definitely outstanding in quality of the rubber compound used, in their respective groups.

For good service, it is essential that rubber footwear receive good care, and this should begin with the purchasing. Here are the most important points to watch.

1. Be sure that the rubbers are of the correct size. If too tight or snug a fit, they will be unduly strained when being pulled on, and their life will be greatly reduced.



Furred cotton fleece-lined corduroy spats, worn over galoshes.

2. The linings should always be dried out under normal room temperatures before putting away. Never dry rubbers near radiators, hot stoves, or other heat sources at high temperature.

3. Oils, fats, and acids are extremely injurious to rubber, and if they do get on the article, should be removed with soap

and water immediately. Dirt and mud, and especially that from barnyard or chicken yard, should also be removed as soon as practicable.

4. Store rubbers that are not being worn in a cool, dark, dry place, away from direct light. Stuff loosely with paper to help retain their shape.

All war footwear is required to be plain and unadorned. Some manufacturers have got around consumer resistance to articles too plain to interest the feminine wearers by offering spats, which will permit Milady to affect a fur-trimmed ankle if she desires and at the same time keep her feet warm when low-cut shoes are worn to dances or parties. The spats can be worn with or without rubbers. However, since they sell for about the same price as a pair of galoshes, it would seem that their purpose is chiefly ornamental.

Another new style is the spectator or snow boots, which have been widely advertised this fall. These are rubber-soled boots which are intended to be worn over the shoes. They are not strictly waterproof, nor as light as galoshes, but they will help keep the feet dry and warm for short exposures because of the extra sole material. Unlike galoshes, their useful life is not terminated when the sole is worn through, for the sole, of stitch-down construction, can be replaced.

The rubbers and galoshes were dissected and examined for construction details important for good service; pieces of

the heels and soles were tested on a machine for resistance to abrasion. No tests of the spectator boots nor the *Motor Boot* spats were made; ratings of these are based on careful examination. The ratings of the rubber footwear are based on the way the footwear is constructed, on ability of sole and heel material to resist abrasion, and the thickness of the rubber in soles and heels. "Fleece lined" in the listings means that the footwear was lined with a soft napped cotton fabric.

### **Men's Rubbers**

#### **A. Recommended**

*U. S. Ardsley* (U. S. Rubber Co., Naugatuck, Conn.) \$1.65. Storm type. Ranked highest in resistance to abrasion of sole and heel, at least 30 to 45% better than any other men's rubbers listed. This brand was below average in details of construction.

*Commonwealth* (Distributed by Montgomery Ward & Co., Cat. No. 26-4766) \$1.29 plus postage. A storm-type rubber. Ranked second in resistance to abrasion of sole and heel, and easily best in this respect of all except *U. S. Ardsley*. Above average in details of construction.

#### **B. Intermediate**

*Goodyear Lincoln Conservation Quality* (Goodyear I.R.G.M. Co., Naugatuck, Conn.) \$1.65. A storm-type rubber. Ranked fourth (about average) in resistance to abrasion of sole and heel. Above average in details of construction.

*Servus 4126* (Servus Rubber Co., Rock Island, Ill.) \$1.56. Storm type. Ranked fifth (below average) in resistance to abrasion of sole and heel. Above average in details of construction.

\* \* \*

The following were of somewhat lower quality than the two preceding brands:

*American Ardsley War Standard* (American Rubber Co.) \$1.45. Sandal type. Ranked third (above average) in resistance to abrasion of sole and heel. Considerably below average of all footwear in the test in details of construction.

*Ball Band Victory* (Mishawaka Rubber & Woolen Mfg. Co., Mishawaka, Ind.) \$1.65. Sandal type. Ranked lowest of men's rubbers in resistance to abrasion (well below the other brands), but ranked highest in construction details.

*Freedom Flexo Sandal* (La Crosse Rubber Mills Co., La Crosse, Wis.; distributed by Sears, Roebuck & Co., Cat. No. 76-9726) \$1.35 plus postage. Two snaps, fleece lined. Ranked second (about average) in resistance to abrasion of sole and heel. About average in details of construction.

*Goodrich Duration Fitall* (B. F. Goodrich Co., Watertown, Mass.) \$1.65. Storm type. Ranked eighth (next to lowest) in resistance to abrasion of sole and heel. About average in details of construction.



Rubber-soled "spectator" or "snow boots," worn over shoes.

*Lastics Duration Quality* (Hood Rubber Co., Division of B. F. Goodrich Co.) \$1.65. Storm type. Ranked sixth (below average) in resistance to abrasion of sole and heel. About average in details of construction.

### **Women's Galoshes**

#### **A. Recommended**

*Servus War Quality* (Servus Rubber Co., Rock Island, Ill.) \$1.63. Two snaps, fleece lined. Ranked highest of women's galoshes in resistance to abrasion (at least 60 to 70% better than any other women's galoshes in the test) and its wear-expectancy per dollar of price was also decidedly the best. Also ranked highest of all women's galoshes in details of construction.

#### **B. Intermediate**

*Commonwealth* (Distributed by Montgomery Ward & Co., Cat. No. 26-4402) \$1.35 plus postage. Two

snaps, fleece lined. Ranked fourth (about average) in resistance to abrasion of sole and heel. About average in construction details.

*Freedom Gaiters* (La Crosse Rubber Mills Co., La Crosse, Wis.; distributed by Sears, Roebuck & Co., Cat. No. 76-9726) \$1.35 plus postage. Two snaps, fleece lined. Ranked second (about average) in resistance to abrasion of sole and heel. About average in details of construction.

*U. S. Gaytees* (U. S. Rubber Co., Naugatuck, Conn.) \$1.73. 3 snaps, fleece lined. Ranked fifth (below average) in resistance to abrasion of sole and heel. Average in construction details.

\* \* \*

The following were of somewhat lower quality than the three preceding brands:

*American War Standard* (American Rubber Co.) \$1.53. Two snaps, fleece lined. Ranked third in resistance to abrasion of sole and heel. Below average in details of construction.

*Ball-Band Victory* (Mishawaka Rubber & Woolen Mfg. Co., Mishawaka, Ind.) \$1.75. Two snaps, fleece lined. Ranked seventh (next to lowest) in resistance to abrasion of sole and heel. About average in details of construction.

*Goodrich Duration Quality Spattershuh* (B. F. Goodrich Co., Watertown, Mass.) \$1.73. Two snaps, fleece lined. Ranked lowest of women's galoshes in resistance to abrasion of sole and heel. Below average in details of construction.

### **Women's Spats**

#### **B. Intermediate**

*Motor Boot Spats* (Cambridge Rubber Co., Cambridge, Mass.; distributed by Sears, Roebuck & Co., Cat. No. 76-9306) \$1.98 plus postage. Fleece-lined corduroy trimmed with fur. Laced in front. Instep strap held by buckle made of plastic, of a design that may prove unsatisfactory in service.

### **Children's Rubbers and Galoshes**

#### **A. Recommended**

*Goodyear Glove Ortho JR630* (Goodyear Co., Naugatuck, Conn.) \$1.65. Two snaps, fleece lined. Easily the best of the children's footwear tested, with the best wear resistance and good construction.

*Ball Band Esko British Victory* (Mishawaka Rubber Co. & Woolen Mfg. Co., Mishawaka, Ind.) \$1.35. Storm type. Ranked second in resistance to abrasion of sole and heel and second (with *Goodyear Glove*) in details of construction.

*U. S. Conservation Quality* (U. S. Rubber Co., Naugatuck, Conn.) \$1.20. Storm type. Ranked fourth (average) in resistance to abrasion of sole and heel. Below average in details of construction.

*Wards*, Cat. No. 26—4434 (American Rubber Co.; distributed by Montgomery Ward & Co.) \$1.25 plus postage. Two snaps, fleece lined. Ranked third (average) in resistance to abrasion. About average in details of construction.

## B. Intermediate

*Tyler Alert* (Tyler Rubber Co., Andover, Mass.) \$1.35. Storm type. Ranked sixth (below average) in resistance to abrasion of sole and heel. Below average in details of construction.

*Goodrich Spattershu Duration Quality* (B. F. Goodrich Co., Akron, Ohio) \$1.68. Two snaps, fleece lined. Poor in resistance to abrasion of sole and heel, but best among children's footwear in details of construction.

*Sears*, Cat. No. 76—9115 (Sears, Roebuck & Co.) 85c plus postage. Storm type. Lightly-made rubbers of average abrasion resistance and not good in quality of construction.

## Snow Boot

### B. Intermediate

*Spectator Boot* (Distributed by Montgomery Ward & Co., Cat. No. 26—4443) \$3.59 plus postage. Rubber sole with vamp and "lower upper" of leather. Upper proper of fabric, simulated suede leather. Interior lined with fabric with pile of a type resembling heavy fleece. Cuff lined with grey felt. Top finished with fabric piled to resemble fur. Seams covered with leather strips. Not as waterproof as galoshes, but considerably warmer. Heavy and awkward in appearance.

## Off the Editor's Chest

[Continued from page 2]

in many ways, that they prefer to buy better quality goods rather than shoddy or makeshift items. It is high time that plants which have had their war contracts cancelled—and there have been a large number of such cases reported in the news during recent months—should be permitted to go to work again, at once, making consumers' goods. There are available for making such goods, for example, great quantities of aluminum and some other metals that have been produced in excess of supplies needed for production of war equipment and materials.

There is some indication, however, that consumers will have to be content with official promises that they will have more needed items by and by. While the front sections of newspapers carry inspired stories from this or that alphabet agency that great things are planned, trade journals and the business sections in a few metropolitan newspapers, which the average consumer never sees, are more realistic and indicate that while production is "planned," there is a great gap between the government's planning and the manufacturer's being actually permitted to go ahead with the man-

ufacturing of the articles.

One shrewd merchandise columnist, for example, warns that "despite promises from the WPB that 1944 will witness an increasing flow of civilian goods to consumer markets, there is no confidence in retailing quarters that the increased supply will be soon forthcoming."

The failure to fulfill promises made almost daily in the press and over the radio will undoubtedly affect civilian morale unfavorably, but it will have distinct advantages from the educational standpoint. Consumers will discover that bureaucrats can take away and divide up (and issue bales of orders and releases for the press) but are functionally incapable of adding one first-class electric iron or an electric washer to the vanished stockpile of vitally necessary household articles.

The illusion of an all-wise, far-seeing, benevolent government creating abundance for the common man by decrees and directives is on the way to being pretty thoroughly dispelled. One curious manifestation of the changed feeling of the consuming, taxpaying public has already occurred in connection with the attempts

of various government agencies and trade bodies alike to get some idea of how much canned food, both home- and commercially-produced, the housewife has on her shelves. Reports are that such stocks are rather large. Attempts, however, that have been made to find out just what these stocks are in the individual homes have been met with distrust among people of all income levels. In one coal-mining district a field agent found that the housewives made no pretense of giving an accurate estimate to a food census-taker, who was one of their immediate neighbors.

The bureaucrats, by stalling on granting permission to idle plants to use surplus materials and labor to make needed goods for consumers, have not done anything to dispel a feeling which seems rather widespread, that perhaps "they just don't want us to have things." Certain it is that in respect to many items such as radio tubes, batteries, fountain pens, and many other common necessary items, the way in which the bureaucrats actually perform indicates a disposition to relax restrictions only in so far as public or Congressional pressure makes it necessary to do so.

# Ratings of Motion Pictures

This section aims to give critical consumers a digest of opinion from a number of reviews, ranging from the motion picture trade press to Parents' Magazine, which rates motion pictures not only on their quality as entertainment but on their suitability in various aspects for children.

It should be emphasized that the motion picture ratings which follow do not represent the judgment of a single person but are based on an analysis of the reviews appearing in some 20 different periodicals. (See January 1944 issue for sources of the reviews.)

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), and C (not recommended).

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

ad—adventure	mus—musical
biog—biography	mys—mystery
car—cartoon	nov—dramatization of a novel
com—comedy	rom—romance
cri—crime and capture of criminals	soc—social-problem drama
doc—documentary	i—in technicolor
dr—drama	tra—travelogue
fan—fantasy	war—dealing with the lives of people in wartime
hist—founded on historical incident	wes—western
mel—melodrama	

A	B	C	
—	2	1	Adventure in Blackmail.....com A
—	1	6	Adventure in Iraq.....war-mel A
—	4	6	Adventures of a Rookie.....war-com AYC
—	—	—	Adventures of Tartu (See Tartu)
—	3	8	Alaska Highway.....mel AY
—	1	8	Always a Bridesmaid.....mus-com AYC
—	8	4	Appointment in Berlin.....war-mel A
—	5	2	Around the World.....war-mus-com AYC
—	1	2	Avenging Rider, The.....wes AYC
—	10	5	Background to Danger.....war-mel AYC
—	3	3	Bar 20.....wes AYC
—	13	6	Behind the Rising Sun.....war-dr A
—	13	5	Best Foot Forward.....mus-com-t A
—	2	3	Beyond the Last Frontier.....wes AYC
—	3	2	Billy the Kid in Cattle Stampede.....wes AYC
—	4	1	Billy the Kid in the Renegade.....wes AYC
—	3	2	Billy the Kid in Western Cyclone.....wes AYC
—	6	—	Black Hills Express.....wes AYC
—	2	4	Black Market Rustlers.....mus-wes AYC
—	5	1	Blazing Guns.....wes AYC
—	4	9	Bomber's Moon.....war-mel AYC
—	5	—	Border Buckaroos.....mus-wes AYC
—	4	—	Bordertown Gun Fighters.....wes AYC
1	2	—	Bullets and Saddles.....wes AYC
—	5	1	Calling Dr. Death.....mys-mel A
—	2	4	Campus Rhythm.....mus-com AYC
—	1	4	Canyon City.....wes AYC
—	—	5	Career Girl.....mus-com A
—	3	2	Cattle Stampede.....wes AYC
—	6	3	Chance of a Lifetime.....cri-mel AYC
1	1	1	City That Stopped Hitler, The.....war-doc A
5	13	1	Claudia.....com A
3	2	—	Coastal Command.....war-dr AYC
1	6	1	Colt Comrades.....wes AYC
2	11	3	Constant Nymph, The.....dr A
3	12	1	Corvette K-225.....war-mel AYC
—	2	4	Courageous Mr. Penn.....hist-dr AYC

A	B	C	
—	—	2	Cowboy Commandos.....war-wes AYC
—	—	9	Crazy House.....mus-com AYC
—	—	7	Crime Doctor, The.....cri-dr AYC
—	—	2	Crime Doctor's Strangest Case.....cri-mel A
—	—	9	Cross of Lorraine, The.....war-mel A
3	—	4	Cry Havoc.....war-dr A
—	—	6	Dancing Masters, The.....com AYC
—	—	3	Danger, Women at Work.....com A
—	—	9	Dangerous Blondes.....cri-com A
1	—	1	Death Valley Manhunt.....wes AYC
—	—	2	Deerslayer.....adv AYC
1	—	6	Desert Song, The.....war-mus-mel-t A
5	—	2	Destination, Tokyo.....war-dr AYC
1	—	10	Destroyer.....war-mel AYC
—	—	15	Dixie.....mus-com-t A
—	—	4	Doughboys in Ireland.....mus-com AYC
—	—	1	Drums of Fu Manchu.....mel AYC
—	—	5	Falcon and the Co-eds, The.....cri-mys AYC
—	—	4	Falcon in Danger, The.....cri-mel AYC
1	—	13	Fallen Sparrow, The.....war-mys A
—	—	5	False Colors.....wes AYC
—	—	1	False Faces.....cri-mys AYC
—	—	1	Find the Blackmailer.....mys-mel A
—	—	5	Fire in the Straw.....dr A
1	—	5	Fired Wife.....com A
—	—	9	First Comes Courage.....war-dr A
3	—	10	Flesh and Fantasy.....dr A
—	—	6	Follies Girl.....mus-com A
—	—	1	Footlight Glamour.....com A
—	—	9	For Whom the Bell Tolls.....war-dr-t A
—	—	9	Frontier Badmen.....wes AYC
—	—	4	Frontier Fury.....wes AY
—	—	4	Fugitive from Sonora.....wes AYC
—	—	3	Gals, Incorporated.....mus-com A
—	—	4	Gang's All Here, The.....mus-com-t A
—	—	6	Gangway for Tomorrow.....war-dr-propaganda A
—	—	2	Gentle Gangster, A.....cri-mel AYC
—	—	5	Get Going.....mus-com AYC
—	—	3	Ghost Ship, The.....mel A
—	—	1	Ghosts on the Loose.....war-com AYC
—	—	1	Gildersleeve on Broadway.....com A
1	—	13	Girl Crazy.....mus-com AYC
—	—	4	Girl from Monterey, The.....mus-com AY
—	—	2	Good Fellows, The.....com AYC
—	—	6	Good Luck, Mr. Yates.....war-dr AYC
—	—	4	Government Girl.....war-com A
—	—	4	Great Mr. Handel, The.....mus-biog-t AYC
—	—	2	Guadalajara.....mus-com A
—	—	7	Guadalcanal Diary.....war-dr AY
—	—	1	Gung Ho.....war-dr A
—	—	5	Guy Named Joe, A.....war-dr A
—	—	3	Hail to the Rangers.....mus-wes AYC
—	—	1	Hands Across the Border.....mus-wes AYC
—	—	8	Happy Land.....war-dr AYC
—	—	3	Harvest Melody.....mus-com AYC
—	—	1	Headin' for God's Country.....war-mel AYC
—	—	3	Heat's On, The.....mus-com A
—	—	4	Heaven Can Wait.....dr-t A
—	—	2	Heavenly Body, The.....com A
—	—	3	Henry Aldrich, Boy Scout.....com AYC
1	—	4	Henry Aldrich Haunts a House.....com AYC
—	—	5	Henry Aldrich Swings It.....mus-com AYC
—	—	7	Here Comes Elmer.....mus-com A
—	—	3	Here Comes Kelly.....com AY
—	—	10	Hers to Hold.....war-mus-dr AYC
—	—	11	Hi Diddle Diddle.....war-mus-com A
—	—	3	Hi 'Ya Sailor.....mus-com A
—	—	5	Higher and Higher.....mus-com A
—	—	10	His Butler's Sister.....mus-dr AYC
—	—	13	Hit the Ice.....mus-com AYC
—	—	14	Holy Matrimony.....nov-com A
—	—	4	Honeymoon Lodge.....mus-com A
—	—	5	Hoosier Holiday.....war-mus-com AYC
—	—	6	Hostages.....war-nov A

A	B	C	
1	13	3	I Dood It.....mus-com A
—	9	4	In Old Oklahoma.....mus-dr A
1	9	3	Iron Major, The.....biog AYC
—	2	6	Is Everybody Happy?.....mus-war-dr AYC
—	1	3	Isle of Forgotten Sins.....adv A
—	4	3	It Happened in Gibraltar.....war-mel A
—	5	4	It's a Great Life.....com AYC
—	6	2	Jack London.....biog A
—	2	1	Jane Eyre.....nov A
1	5	1	Jeannie.....rom AYC
—	3	1	Jive Junction.....mus-dr AYC
1	11	3	Johnny Come Lately.....dr AY
—	10	1	Kansan, The.....wes AYC
—	14	2	Lady Takes a Chance, A.....com A
—	2	8	Larceny With Music.....mus-com A
8	8	2	Lassie Come Home.....nov-t AYC
—	3	3	Law Rides Again, The.....wes AYC
—	11	8	Let's Face It.....war-mus-com A
2	1	—	Life and Death of Col. Blimp.....war-dr A
—	2	5	Life of Simon Bolivar.....hist A
—	3	—	Lodger, The.....cri-mel A
—	3	2	Lone Star Trail, The.....wes AYC
2	6	—	Lost Angel.....com AYC
—	3	8	Mad Ghoul, The.....cri-mel A
8	4	—	Madame Curie.....biog AYC
—	8	5	Man from Down Under, The.....war-mel A
1	6	1	Man from Music Mountain.....mus-wes AYC
—	2	3	Man from Rio Grande, The.....wes AYC
—	3	—	Man from Thunder River.....wes AYC
—	5	3	Melody Parade.....mus-com AYC
—	4	—	Mexican Rose (re-issued).....mus-wes AYC
—	2	7	Mexican Spitfire's Blessed Event.....com A
—	3	5	Minesweeper.....war-mel AYC
1	3	2	Miracle of Morgan's Creek, The.....com A
—	3	2	Moonlight in Vermont.....mus-com AYC
—	2	5	Mr. Muggs Steps Out.....tri-com AYC
—	1	9	Murder on the Waterfront.....war-mel A
—	11	3	My Kingdom for a Cook.....com A
—	6	2	Mystery Broadcast.....mys A
—	3	6	Mystery of the 13th Guest, The.....mys-mel A
—	3	5	Nearly Eighteen.....mus-com A
—	5	2	Never a Dull Moment.....mus-com AYC
—	4	5	Night Plane from Chungking.....war-mel AY
2	10	2	No Time for Love.....com A
—	4	4	Nobody's Darling.....mus-dr AYC
4	9	3	North Star, The.....war-dr-propaganda A
—	8	7	Northern Pursuit.....war-mel AYC
—	2	5	O, My Darling Clementine.....mus-com A
—	10	5	Old Acquaintance.....dr A
—	1	2	Outlaws of Stampede Pass.....wes AYC
—	3	2	Overland Mail Robbery.....wes AYC
—	5	3	Paris After Dark.....war-mel A
—	5	3	Passport to Suez.....war-mys AYC
—	1	9	Petticoat Larceny.....cri-mel A
3	11	4	Phantom of the Opera.....mus-dr-t A
—	4	3	Pistol Packin' Mama.....mus-wes A
—	2	5	Prairie Chickens.....com AYC
1	14	—	Princess O'Rourke.....rom AYC
—	2	2	Return of the Rangers.....mus-wes AYC
—	4	—	Return of the Vampire.....mys-mel A
—	7	—	Revenge of the Zombies.....war-mel A
—	5	—	Ride, Tenderfoot, Ride (re-issued).....mus-wes AYC
—	2	4	Riders of the Rio Grande.....wes AYC
—	10	5	Riding High.....mus-com-l A
—	4	2	Robin Hood of the Range.....mus-wes AYC
—	3	2	Rookies in Burma.....war-com AYC
1	1	3	Russian Story, The.....hist A
5	12	—	Sahara.....war-dr AYC
—	1	5	Saint Meets the Tiger, The.....cri-mel AYC
1	6	3	Salute to the Marines.....war-mel-t AYC
—	1	7	Scream in the Dark, A.....mys A

A	B	C	
—	8	8	Seventh Victim, The.....mys-mel A
—	1	6	Shadow of a Doubt.....cri-dr A
—	—	4	Sherlock Holmes Faces Death.....cri-mel AYC
—	—	3	She's for Me.....mus-com A
—	2	2	Shrine of Victory, The.....war-doc AYC
—	—	2	Silver City Raiders.....wes AYC
—	—	3	Silver Spurs.....mus-wes AYC
—	—	—	Simon Bolivar (See Life of Simon Bolivar)
—	—	1	Sing a Jingle.....mus-com AYC
—	—	3	Six-Gun Gospel.....wes AYC
—	11	7	Sky's the Limit, The.....war-mus-com AYC
—	—	2	Sleepy Lagoon.....mus-dr AYC
—	1	3	Smart Guy.....cri-dr A
—	7	10	So Proudly We Hail.....war-dr AY
—	—	1	So This Is Washington.....war-com AYC
—	10	1	Someone to Remember.....com A
—	5	4	Son of Dracula.....mel A
—	1	2	Song of Russia.....war-dr AYC
—	4	4	So's Your Uncle.....com AYC
—	—	1	Spider Woman.....cri-mel A
—	7	2	Spotlight Scandals.....mus-com A
—	—	3	Standing Room Only.....war-com A
—	—	5	Strange Death of Adolph Hitler, The.....war-mel A
—	3	1	Stranger from Pecos, The.....wes AYC
—	6	5	Submarine Alert.....war-mel A
—	—	4	Submarine Base.....war-mel A
—	2	2	Sultan's Daughter, The.....mus-com A
—	2	2	Suspected Person.....mys A
—	2	13	Sweet Rosie O'Grady.....mus-com-l A
—	—	1	Swing Fever.....mus-com A
—	—	3	Swing Out the Blues.....mus-com AYC
—	—	1	Swingtime Johnny.....mus-com A
—	11	5	Tartu.....war-mel A
—	4	5	Tarzan's Desert Mystery.....war-adv AYC
—	2	1	Tender Comrade.....war-dr A
—	2	7	Thank Your Lucky Stars.....mus-com AYC
—	1	6	That Nazy Nuisance.....war-com AYC
—	5	1	There's Something About a Soldier.....war-com AYC
—	—	—	Thirteenth Guest (See Mystery of)
12	8	—	This Is the Army.....war-mus-t AYC
5	12	—	Thousands Cheer.....war-mus-t AYC
—	1	3	Three Russian Girls.....war-dr AYC
—	7	5	Thumbs Up.....war-mus-com AYC
—	1	6	Tiger Fangs.....war-mel AYC
—	1	2	Timber Queen.....mel AYC
1	10	3	Top Man.....war-mus-com AYC
—	4	5	Tornado.....mel A
—	12	4	True to Life.....mus-dr AYC
—	5	9	Two Senoritas from Chicago.....mus-com A
—	11	1	Two Tickets to London.....war-mus-dr AYC
—	1	5	Underdog, The.....mel AYC
—	3	3	Uninvited, The.....mys-mel A
1	6	1	Unknown Guest, The.....mel A
3	8	2	Victory Through Air Power.....car-propaganda-t AYC
—	3	2	Wagon Tracks West.....wes AYC
6	11	—	Watch on the Rhine.....war-dr A
—	1	2	West of Texas.....mus-wes AYC
—	2	4	West Side Kid, The.....cri-mel A
—	9	8	We've Never Been Licked.....war-mel AYC
—	—	3	What a Man!.....com A
—	10	2	What a Woman!.....com A
—	6	6	What's Buzzin', Cousin?.....mus-com AYC
—	5	—	Where Are Your Children?.....mel A
—	4	2	Whistling in Brooklyn.....cri-com AYC
—	—	5	Wild Horse Stampede.....wes AYC
—	6	7	Wintertime.....mus-com AYC
1	4	—	Woman of the Town, The.....mus-wes A
—	5	1	Women in Bondage.....war-dr A
2	1	—	World of Plenty.....propaganda A
—	4	6	Yanks Ahoy.....war-com AYC
—	7	2	Young Ideas.....com A
—	2	1	Young Man's Fancy, A.....com A
—	4	4	You're a Lucky Fellow, Mr. Smith.....mus-com A

# The Consumers' Observation Post

[Continued from page 4]

A TYPICAL TILE CEMENT for resetting loose tile and bathroom fixtures and intended also for use for filling holes in plaster, cement, or woodwork, was found by chemical analysis to be a mixture of about half whiting and about half a solution of sodium silicate known as Type N.

\* \* \*

FREEZER STORAGE CABINETS for home use are scheduled to be produced in huge quantities after the war. Indeed, it is predicted in some quarters that there will be overproduction, a mad scramble for business, and inevitable failures which from the consumer's point of view means that he may be stuck with an expensive "orphan." The more conservative elements in the electric-refrigeration trade wonder whether people's habits will be so drastically changed that they will prefer their own home-grown, home-butchered, home-frozen food to that formerly obtainable in grocery and butcher shops. Farm families, however, are expected to become customers for quick-freezer and freezer-storage chests as soon as they can be obtained.

\* \* \*

PRESSURE CANNERS, VICTORY-MODEL TYPES, made their appearance in stores last season after the peak of the home-canning season was over. While no large stock was evident, several different makes of a type designed by a government agency were to be found in many stores in New York City and other eastern cities during recent months. The quality of the canners is considerably below that of pre-war models and possibly consumers decided to forego stocking their larders with fruits, vegetables, and meat that should be cooked in pressure canners; probably a great many have decided to take the risk of going back to grandmother's methods of canning and preserving.

\* \* \*

DEHYDRATED MUSHROOMS are being "discovered" by food columnists as something that will add a "certain something" to soups, sauces, eggs, spaghetti, and other dishes. In times of scarcity and in view of the high price of fresh mushrooms, they may be a passable substitute. They do not compare in flavor with the dried mushrooms of pre-war days, customarily found in Italian food shops, which were said to be made from wild mushrooms, and when added to kidney stew really provided a "dish with a difference."



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**NEW PRODUCTS:** Lavista Sponge, a disposable washcloth, is a piece of cotton compressed into a small tablet measuring approximately 1-1/4 inches in diameter by a little less than 1/2 inch thick. When this is held under the water faucet it gradually swells and opens out to a rectangle measuring approximately 5-1/2 inches by 3-1/2 inches. For use by travellers or sick persons, this device is quite convenient and it may be readily thrown in the wastebasket or waste can after it has been used. Many a traveller, particularly of the feminine sex, will be delighted to learn of this solution for the problem of disposing of a damp washcloth. The price of the tablets (as distributed by Maurice Levy in New York City and sold at Lewis & Conger, Sixth Avenue at 45th Street, New York City), 10 tablets for 75c, puts them definitely into the luxury class. It would be cheaper for most users to buy washcloths by the dozen at the five-and-ten-cent stores or mail order houses, and throw one away when circumstances make it necessary. However, the idea of using these small, compact compressed cotton tablets for the purpose is an excellent one and if there is any great demand for such a product, some enterprising manufacturer will undoubtedly arrange to make and market them at a much lower figure.

\* \* \*

Universal Threader and Seam Ripper, is a little gadget sold by The Singer Manufacturing Company, priced at 50c. The threading device does simplify the problem of threading a needle, provided that it is within reach whenever it is needed for use, but it takes a little time to get used to it. Provision has been made for replacing the tiny hook which forms the threading device in case it is broken in use (and this can happen), and two spare hooks come with the device at the time of purchase. The seam ripper works very well. The shape of the blade is excellent for its purpose; the pointed tip gets into out-of-the-way places very conveniently. The ripper must be handled with care, however, because the exposed blade is very sharp and requires the same care in use, to avoid cutting oneself, as does a sharp penknife. This sharp blade, however, is arranged to swing out of the way and snap into place in a shielded recess so that it does not involve a hazard of cutting oneself when it is not in use.

Soilax, a new product now being widely sold for washing of walls and paint, and "cleaning everything in the home," is for the most part our old household friend trisodium phosphate in a new guise and box, except that a small amount of ammonium chloride (3%) is included in the formula. (This is considered to be a useful addition.) Other well-known trade brands of tri-sodium phosphate in package form, used by dissolving in water, for softening water, for dishwashing and a wide variety of household cleaning work were: Mel'o, Tri-S-P, Climalene, Dif, Oakite. Another product, Phos, corresponding to a mixture of trisodium phosphate and tetrasodium pyrophosphate (tspp.) in the proportion of 3 to 1 has been recommended by CR for use in washing of clothes and in dishwashing machines. Phos is an "open-formula" product, that is, its actual composition is disclosed so that the consumer may know exactly what he is buying. Its price is \$1.25, plus postage, for 10 pounds (New Dorp Chemical Co., New Dorp, Staten Island, New York).

GIVE THESE BLANKS TO FRIENDS

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# PHONOGRAPH RECORDS

By Walter F. Grueninger

Please Note. Prices quoted do not include taxes. In the ratings AA indicates highly recommended; A, recommended; B, intermediate; C, not recommended.

THE equipment with which I test records rated in these columns is essentially a choice of a Brush PL20 crystal pickup or an Audax D38H magnetic pickup; Thordarson 2A3 Phono Amplifier; three Cinaudagraph speakers housed in a 20 x 32 x 54 inch cabinet lined with Ozite padding about 1½ inches thick at some distance from the amplifier and connected to it by a 6-wire cable. Two internationally famous violinists told me on different occasions during the past few months they had never heard better reproduction of their records than with this equipment. One violinist heard only the Brush pickup. The other heard both pickups, and designated the Brush as the one which more nearly reproduced the tone of his violin.

The chief complaint about commercial records voiced by one of the artists concerned the limitation of dynamic contrasts. Recording engineers request, he claimed, that instrumentalists play *mezzo forte* (moderately loud) with little variation in volume, thus robbing the music of much of its accustomed color. A *sforzando* (one note played with emphasis) had to be guarded against in particular. But if the players failed to follow these instructions closely enough, the engineers, by use of their electrical monitoring controls, would usually reduce the volume reaching the recording needle and thus achieve about the same pallid result.

Playing too softly, in the present state of the art of record-making, may result in needle scratch overshadowing music. Playing too loudly may result in overcutting grooves (too wide swings of the cutting needle) and consequently breaking down groove sides.

The dynamic range (permissible variation in loudness recorded) needed to give lifelike reproduction, it is widely held, is one which is expressed in engineering terms as 75 decibels. At the best, current practice in commercial recording limits dynamic range to 50 decibels, with the average around 40.

## Ratings of Phonograph Records

### VOCAL

**Gabrieli:** Processional & Ceremonial Music—*In Ecclesiis Benedicte Domino* (3 sides)—*O Jesu Mi Dulcissime* (3 sides)—*Jubilate Deo* (2 sides). Harvard Glee Club, Radcliffe Choral Society, Boston Symphony Orchestra Brass Choir, E. Power Biggs (organ) under Woodworth. Victor Set 928. \$4.50. A welcome addition to the list is this dramatic, varied, novel music. Giovanni Gabrieli was first organist at St. Mark's Church in Venice when he died in 1612. Bach and Handel carried his style to its zenith but no apologies need be made for the compositions presented here. The performance is commendable and the recording possesses depth and resonance seldom achieved in American recordings of chorus and instrumentalists. Surfaces are audible and there is a buzz now

and then. Notwithstanding these imperfections, I recommend this set to those seeking distinctive vocal music off the beaten path.

Interpretation AA  
Fidelity of Recording AA

**Metropolitan Revivals.** Caruso, Sembrich, Tetrazzini, Farrar, Hempel, Alda, Homer, Scotti, Amato, Journet, de Segurola, Rothier (singers). 8 sides, Victor Set 953. \$10.50. There is ample evidence here that Caruso and his companions stood head and shoulders above the present singers at the Metropolitan Opera House. The album presents eight widely known operatic ensembles with Caruso singing in all. Included are the sextet from *Lucia*, quintet from *Un Ballo in Maschera*, the quartets from *Rigoletto*, *La Boheme*, *Martha*, and the trios from *Lombardi*, *Faust*, and *Samson*. The crude, pre-electric recording does not compare favorably with most recent efforts, for getting a group of singers in balance around a horn was far more difficult than around today's microphones. Surfaces are audible, too. But for all that, I treasure the set. Victor announces this is the first in the Hall of Immortals Series, presented in a limited edition. Early purchase, if the set is wanted, is recommended.

Interpretation AA  
Fidelity of Recording C

### LIGHT, POPULAR, AND MISCELLANEOUS

**Kent-Gannon:** *I'll be Home for Christmas & Weatherly: Danny Boy.* Crosby (baritone). 2 sides, Decca 18570. 50c. Bing's performance of *Christmas* is "terrific," to use a current Broadway term of approval, whereas his *Danny Boy* is most emphatically not recommended. This despite the Decca press release claim that *Danny Boy* "shows off the Crosby voice to best advantage." Discreet orchestral accompaniment. Quiet surfaces.

Interpretation B  
Fidelity of Recording AA

**Rodgers-Hammerstein:** *Oklahoma.* Members of the original New York production. 12 sides, Decca Set 359. \$5. The popular musical play *Oklahoma* is regarded as the successor to *Show Boat*. This album offers excerpts from the play's music. Joan Roberts' singing does not match that of her partner Alfred Drake. The orchestra is not always sufficiently front, in relation to the singers. Side 12, *Finale*, repeats the hit songs *Oh, What a Beautiful Mornin'* and *People Will Say We're In Love* which are recorded on other sides. None of the other numbers stands up as well as these. Certainly the original cast, here recorded, gives far more flavor to the music and the words than the crooners and other Tin Pan Alley performers who have already recorded some of these selections. Surfaces are quiet.

Interpretation A  
Fidelity of Recording A

**Schwartz-Loesser:** *The Dreamer & How Sweet You Are.* Armen (soprano). 2 sides, Decca 18566. 50c. Slow, steady tempo popular songs from the motion picture *Thank Your Lucky Stars*. Clear diction. Choral background. Quiet surfaces.

Interpretation AA  
Fidelity of Recording AA

**Schwartz-Loesser:** *They're Either Too Young or Too Old & Raye-De Paul: Star Eyes.* Jimmy Dorsey and His Orchestra. 2 sides, Decca 18571. 50c. Kitty Kallen sings in both, assisted by Bob Eberly in *Star Eyes*. In fact, on both sides, there is more vocal than band. Neither of the singers handles the material to full advantage. Fuzzy recording. *Star Eyes* swishes.

Interpretation B  
Fidelity of Recording B

**Stept: I've Had This Feeling Before & Loesser: Have I Stayed Away Too Long.** Como (baritone). 2 sides, Victor 20-1548. 50c. Strict tempo performances of popular ballads with mixed choral backgrounds. Audible surfaces.

Interpretation A  
Fidelity of Recording AA

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